FINAL REPORT OF THE TASK FORCE ON DISTRIBUTED ENERGY RESOURCES AND NET METERING



December 2023



The Honorable Dean Plocher, Speaker of the House of Representatives State Capitol Building, Room 308 Jefferson City, MO 65101

The Honorable Caleb Rowden, President Pro Tem of the Senate State Capitol Building, Room 326
Jefferson City, MO 65101

Dear Mr. Speaker and Mr. President:

The Task Force on Distributed Energy Resources and Net Metering has met, taken testimony, and discussed various facets of distributed energy resources and net metering. In this final report, we present the information received from various sources along with our formal recommendations. The undersigned members of the Task Force are pleased to submit the attached report.

BD	Mike Cierpest
Rep. Bishop Davidson, Chair	Sen. Mike Cierpiot, Vice Chair
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Rep. Betsy Fogle	Sen. Doug Beck
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I. Charge of the Study Commission

The Task Force on Distributed Energy Resources and Net Metering (hereafter referred to as the "Task Force") was formed by Senate Bill 820 in 2022 and is composed of fourteen members representing both the public and private sectors. The Task Force is charged with researching and providing information on the following:

- 1. A distributed energy resources study, including a value of solar study along with the practical and economic benefits, challenges, and drawbacks of increased distributed energy generation in the state;
- 2. Potential legislation regarding community solar as operated by nonutility entities and the fair and equitable setting of rates between distributed generation and nondistributed generation consumers; and
- 3. Potential legislation, including any changes to the Net Metering and Easy Connection Act that would promote the overall public interest.

In 2023, the Task Force held public hearings and solicited public testimony. Hearings were held on the following dates:

•	May 30, 2023	State Capitol, Jefferson City
		State Capitol, Jefferson City
	October 19, 2023	State Capitol, Jefferson City

Archived video of each hearing can be found on the House of Representatives website at https://house.mo.gov/MediaCenter.aspx?selected=DebateArchive.

II. Task Force Activities

A. Summary of the May 30, 2023 meeting

The Task Force held an organizational meeting to discuss the charges and goals of the Task Force. At the meeting, the Task Force elected Rep. Bishop Davidson as Chairman and Sen. Mike Cierpiot as Vice-Chairman.

B. Summary of the June 15, 2023 meeting

The Task Force discussed the statutory requirement for a distributive energy resources study, what the study should include, and a timeline for various sizes of studies. Karen Boeger, the Director of the Office of Administration's Division of Purchasing, presented to the Task Force the state procurement and bid process. In her testimony, she also provided the timeline of steps for the process and ways to expedite the process.

After the presentation, the Task Force discussed with the representatives of the Department of Natural Resources what various types of distributed energy resource studies would include and an estimated cost for each. The Task Force discussed what members would like to include in a study. The Chairman asked that members of the Task Force provide him feedback on scope of the study.

The Task Force also heard testimony regarding the history of distributed energy resources from differing industry perspectives.

Municipal Utilities Perspective:

Elizabeth Smith and Mike Siefert, Missouri Public Utilities Alliance (MPUA) Representatives from MPUA testified regarding the history of municipal electric utilities in the state. In the late 1970's, the Missouri Joint Municipal Electric Utility Commission was formed to allow municipal utilities to combine resources to buy into power projects. Currently municipal power supplies are primarily fossil fuel based but municipal utilities are starting to expand into other sources of power, including solar farms.

MPUA requested that the Task Force look into consumer protection measures on the installation of distributed energy resources, linemen safety measures for those working to restore power after natural disasters and storms, and stability in the grid and markets, especially for backup power supplies.

Solar Providers:

Philip Fracica, Renew Missouri

Fracica testified to the history of energy policy and oversight in Missouri, including the passage of the Net Metering and Easy Connection Act. Over the years, the General Assembly has proposed legislation to modify the Act without a study to determine the value of solar to the customers or the utility. In 2008, the citizens of Missouri passed Proposition C, the Renewable Energy Act. Missouri has since moved from one of the states with the least renewable energy to middle of the pack with the implementation of several renewable energy policies. Access to

renewable energy has become an economic development tool. Some large companies are making business decisions based on the availability of renewable energy. Therefore it is important to ensure that state policies promote the availability of renewable energy resources.

Missouri Electrical Cooperatives:

Chris Rolfing, Boone Electric Cooperative

In 1936, the Boone Electric Cooperative was formed to provide electricity to the areas outside the city limits of Columbia. In the 1940's, several electric cooperatives joined together to form a generation and transmission cooperative to build a power plant in Chamois and purchase power from other generators. Once demand outgrew what the generation and transmission cooperative could produce, Associated Electric Cooperative was formed to produce power.

Cooperatives pride themselves on providing reliable and affordable power. Twenty-five percent of power supplied by the cooperatives is renewable, mostly hydro and wind generation. In the mid 2000's, cooperative customers began adding residential solar panels to their homes. In 2016, Boone Electric Cooperative added a solar farm to allow customers access to solar without having to invest in a residential solar system. Currently, a little more than half of the solar farm panels are spoken for.

Rolfing testified to the way that the cooperatives determine costs, including fixed costs, for typical customers and for net metering customers. The changes in customer demographics, as more customers add residential solar systems, have changed how costs need to be distributed across the different customer types.

C. Summary of the October 19, 2023 meeting

The Department of Natural Resources' Division of Energy presented the Value of Distributed Energy Resources in the Midwest Study the Task Force had requested. The department had reviewed studies prepared by Arkansas, Indiana, Michigan and Minnesota. Hannah Humphries, Deputy Director of the department, stated that Illinois is currently conducting a study that has yet to be published. The department's study is attached in Appendix A.

The Task Force heard additional testimony from interested stakeholders.

Kurt Kreisel, Artisun Solar

Kreisel spoke to the financial reasons why companies install commercial solar projects and how the current billing methods affect his customers. Regardless of if a commercial customer installs solar systems, customers cross subsidize other customers based on time of energy use.

Rodney Bourne, Rolla Municipal Utilities and Joe Hegendeffer, Independence Power and Light Bourne testified that municipal utilities support solar systems. However, many times the utilities are the last person involved in the installation, which does not allow the utility to help the consumer get the best rate of return from the system without being overbuilt. Bourne asked that the Task Force look at implementing a level of consumer protection measures.

Hegendeffer testified to the misinformation being presented to customers by some solar companies regarding the efficacy of home solar systems. He also spoke to loss of equity from residential connections if net metering customers produce a zero energy charge. In order to maintain a reliable and affordable energy system, net metering customers need to pay for the fixed costs associated with the distribution system.

Nicholas Barrack, Electrical Engineer from Rolla

Barrack testified regarding a study he prepared regarding the cost of solar to the utility and other customers of the utility. In 2022, the cost was a net gain to the utility and other customers, but 2022 was a unique year due to the cost of energy. In 2023, the net impact is significantly less. Barrack's study can be found in Appendix B.

Darrin Gordon, Hannibal Public Works

Gordon testified to how in Hannibal the utility rates and net metering affect all income classes of his customers. He also discussed the fixed costs of producing energy and how capacity needs are calculated for his system and how that determines the energy costs.

Ryan McDonald, Solar Energy and Paul McKnight, MOSEIA

McDonald testified to the need for collaboration and consistency between utilities and solar system providers. If collaboration is not increased, as technology increases, customers will sever the relationship with the utility company and rely solely on solar generation. This is not necessarily in the best interest of customers.

McKnight testified that his member companies would like to see more consistency when solar companies work with utility companies to ensure that customers get the best system for their needs. Solar customers benefit all users of the grid.

Kenneth Raming, Ozark Electric Cooperative

Raming testified that the electric grid has changed with the introduction of distributive energy resources on the grid. There are now different safety concerns that must be considered including the safety of the linemen, safety of the overall system, and the safety of the member or consumer. Raming said Ozark Electric Cooperative does this through an engineering study before the installation a generation system.

Cheryl Markum

Markum spoke about her experience with building her net zero energy home in 2006 and the concerns she has with the implementation of the Net Metering and Easy Connection Act by her cooperative.

Darrell Dunlap, City of Fulton

Dunlap testified to the effect of distributive energy on small utility systems, including the cost of purchasing power during times of reduced generation by distributed energy resources.

Cole Tippett, Tri-County Electric Cooperative and Tom Hulce, CoMo Connect Tippett testified to the concerns about how rate structures subsidize demand costs of solar users and the need for safety standards for the installation of systems. Tippett also spoke about concerns regarding predatory practices of solar vendors and the need for consumer protections.

Hulce presented the Task Force with specific examples of member experiences with solar companies.

III. Recommendations

Upon holding its meetings and taking testimony from industry stakeholders and members of the public, the Task Force makes the following recommendations:

- 1. The General Assembly should reauthorize the Task Force to continue its work through December 31, 2026. The reauthorization should expand the Task Force's scope to include review of the consumer protections in place for consumers of distributed energy resources and necessary enhancements to such protections;
- 2. The Task Force should work with the Department of Natural Resources' Division of Energy to contract for and complete a full Distributed Energy Resources Study; and
- 3. The General Assembly should provide the Department of Natural Resources with at least a \$500,000 budget appropriation to complete the study.

Appendix A: Value of Distributed Energy Resources in the Midwest

Value of Distributed Energy Resources in the Midwest

October 2023

Submitted to Task Force on Distributed Energy Resources and Net Metering

Compiled by
Missouri Department of Natural Resources
Division of Energy

Summary

The Missouri Department of Natural Resources' Division of Energy explored state-level value of distributed energy resources (DERs) discussions and studies conducted in the Midwest. Findings are summarized below for Arkansas, Indiana, Michigan, and Minnesota. Also of note is that the Illinois Commerce Commission is undertaking an investigation into the value of, and compensation for, DERs in response to Public Act 102-0662. Based on department staff's knowledge and research, there are no results to report for other states surrounding Missouri or for Wisconsin or Ohio.

The information below should be interpreted with caution due to policy differences between states, as well as possible future changes in factors such as technologies and energy markets.

Arkansas¹

Originally, Arkansas required net-metered customers to be compensated for excess generation at the full retail rate. Subsequent legislation and an Arkansas Public Service Commission (APSC) proceeding attempted to address issues related to costs and benefits associated with net metering. Electric utilities and proponents of net metering did not agree as to the proper approach. Electric utilities favored either crediting for excess generation at avoided cost or payment of a monthly grid charge by net-metered customers. Other stakeholders recommended maintaining the *status quo* given the benefits of renewable energy and low penetration of net metering, the latter of which precluded a proper cost-benefit analysis. Following more legislation and additional stakeholder disagreement, the APSC maintained full retail rate compensation for smaller facilities but instituted a grid charge (initially set at zero dollars) for larger facilities because of possible cost shifting. The decision was later partly overturned by the Arkansas Court of Appeals.

In 2023, Act 278 required the APSC or other applicable commission to ensure that net-metered customers pay either all costs of an electric utility's facilities and associated expenses or the appropriate portion of the costs and associated expenses as determined under a commission-approved rate schedule, with such costs consisting of those required to provide service to these customers and enable their use of the utility's facilities. The APSC or other applicable commission must also approve rates that, at each electric utility's election, either credit all net-metered generation from customers at avoided cost or institute a monthly grid charge. The act includes grandfather clauses.

Indiana²

The Indiana Utility Regulatory Commission responded to House Enrolled Act 1278 (2019) by contracting with the State Utility Forecasting Group (SUFG), Lawrence Berkeley National

¹ See <u>2022 Ark. App 215</u> and <u>Arkansas Act 278 (2023)</u>.

² See Indiana Utility Regulatory Commission, 2020, <u>2020 Report to the 21st Century Energy Policy Development Task Force</u>, pp. ii, 27-28, 34, 39-41, and 50-61 and <u>Indiana HEA 1278</u> (2019).

Laboratory (LBNL), and the Indiana University Public Policy Institute. SUFG modeled changes to least-cost resource additions and electricity prices based on generation retirements and demand-side management levels in utility integrated resource plans while considering changes in factors such as fuel costs, the timing of coal-fired power plant retirements, and industrial customer self-generation. LBNL analyzed the impacts of emerging technologies on utility distribution systems based on distribution system power flow analyses, generation and transmission capacity expansion modeling, simulated effects on customer outage frequencies and durations, and an assessment of reductions in distribution system-level, long-duration interruptions.

SUFG's analysis includes a scenario with higher industrial self-generation and use of combined heat and power. Under this scenario, wind capacity increases are forecasted to be higher, while combined cycle, combustion turbine, and solar additions are anticipated to be lower. Power prices are projected to be higher due to a greater decline in sales compared to revenue requirement decreases.

LBNL's scenario-based analysis considers varying levels of rooftop solar, electric vehicle (EV) charging, and battery storage adoption, with certain assumptions as to demand response and energy efficiency. The study addresses only certain value impacts. The general modeled findings are that:

- High rooftop solar adoption results in system-wide savings. High adoption and charging of EVs leads to higher system costs. Most cost impacts are associated with generation.
- Rates decrease in the short-term with high rooftop solar adoption, but increase for all scenarios in the long-term. Rate increases result from recovery of costs over lower sales volumes and higher peak demand that increases infrastructure investments.
- Voltage violations are relatively rare, and line loading issues are minimal. Lines losses
 increase with high electrification and high overall distributed energy resource
 penetration, but decrease with high solar and solar-plus-storage adoption.
- Battery adoption improves customer reliability but only leads to modest system-level reliability improvements, assuming discharged energy is only consumed behind the meter.

Michigan³

The Michigan Public Service Commission (MPSC) was encouraged by Senate Resolution 143 (2020) to undertake a study on reliability, interconnection, and related grid integration issues for distributed energy. MPSC aligned this objective with their multi-year MI Power Grid efforts, tasking the Distribution System Data Access workgroup to complete a grid integration study. To meet the objectives of the MI Power Grid initiative and Senate Resolution 143, the MPSC developed a summary report of DERs-related considerations and information from other states and non-Michigan utilities. The document addresses topics beyond the value of DERs and includes references to information from California, D.C., Delaware, Maryland, New Hampshire,

³ See Michigan Public Service Commission, 2023, *Grid Integration Study Report* and <u>Michigan SR 143 (2020)</u>.

New Jersey, North Carolina, Hawaii, Massachusetts, Minnesota, Nevada, New York, Rhode Island, Virginia, and Texas. The MPSC was assisted in its work by the National Renewable Energy Laboratory.

The summary anticipates an increase in both residential and commercial distributed generation installations. Additionally, the report indicates an expectation that the combination of decreasing costs of energy storage will to lead to continued growth in the adoption of energy storage systems.

The summary suggests an array of benefits that come with integrating additional DERs into the distribution system. These benefits include reduction of grid congestion, avoided fuel costs, back-up power in the event of a power outage, and improved grid efficiency. According to the summary, these benefits are maximized through examining the distribution system characteristics, strategic project siting, and selecting DERs based on their operating attributes. With the integration of more DERs into the system, the summary anticipates a higher likelihood of needing costly distribution system upgrades. Under Michigan statute, interconnection customers pay the cost of any upgrades.

To facilitate the adoption of residential DERs and EVs, the summary recommends a minimum level of electric service to be made available to all residential customers to ensure that the distribution system can accommodate DERs and EVs. The summary also recommends the need for service panel upgrades to incorporate increased adoption of DERs and EVs.

Minnesota⁴

The Minnesota Department of Commerce contracted Clean Power Research in response to House File 729 (2013), which allowed investor-owned utilities to apply for a Value of Solar (VOS) tariff in lieu of net metering. The legislation required the VOS tariffs to account for energy and its delivery, generation capacity, transmission and distribution line losses, and environmental value. The methodology considers generation, transmission and distribution capacity costs, fuel costs, environmental costs, plant operations and maintenance costs, and reserve capacity costs. Notably, the methodology does not consider benefits associated with local manufacturing, market price reduction, and disaster recovery.

As implemented in Minnesota, VOS tariffs created a new accounting method for compensating solar producers and provide for long-term contracts with solar energy producers. Rather than kilowatt-hour-based compensation, VOS tariffs compare the cost of purchased energy with the value of produced solar energy. From the customer's perspective, the state found that the value of solar would be an improvement over net metering in the short term and would make

⁴ See Minnesota Department of Commerce, 2014, <u>Minnesota Value of Solar Methodology</u> (<u>mn.gov</u>), <u>Minnesota HF 729 (2013)</u>, and Minnesota Public Utilities Commission, In the Matter of the Petition of Northern States Power Company, dba Xcel Energy, for Approval of Its Proposed Community Solar Garden Program, Docket No. E-002/M-13-867, <u>Order Approving Value-of-Solar Rate for Xcel's Solar Gardens Program, Clarifying Program Parameters, and Requiring Further Filings, September 2016.</u>

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residential and commercial solar more cost-effective than net metering when combined with federal incentives. While utilities would see a slight short-term increase in cost compared to residential net metering, utility costs would decline over the course of a 25-year VOS contract.

Following House File 729, the Minnesota Public Utilities Commission approved a final order that made Minnesota the first state to apply a VOS tariff framework to community solar projects. The approved rate uses a formula designed to reflect the costs and benefits of solar. The rate used is determined annually and must be approved by regulators.

Appendix B: Testimony of Nicholas Barrack

Testimony of Nicholas Barrack to Task Force on Distributed Energy Resources and Net Metering

October 19, 2023

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Dear Committee Members:

My name is Nicholas Barrack, and I am providing testimony and studies to support additions to Missouri's Net-Metering and Easy Connection Act. I am an electrical engineer with a Bachelor of Science and Master of Science Degree from the University of Missouri at Rolla and I am also a journeyman electrician. I have owned an electrical contracting company for 40 years and have been installing solar energy systems for the last five. I am also a board member of Rolla Municipal Utilities (RMU) since 2009 and served as Board President for most of that time. As a professional solar installer, an engineer, and a long-time utility board member, I have a thorough understanding of the technology and the issues as seen from many perspectives.

The common belief in the utility industry is that solar customers are subsidized by non-solar customers. My gut feeling has always been that this was wrong and the inherent value of solar energy was greater than what some utilities were charging. Of course, many disagreed with me but could not cite any studies. To prove this one way or the other I began a thorough study in 2021. I gathered energy data from systems my company installed, from utility scale systems, and utilized the tools offered by NREL. I gathered cost data from MoPEP (Rolla's wholesale electricity supplier) using actual invoices for wholesale energy. One outcome of this study was that because Rolla's charge for electricity was just 7.9¢ per Kwh there was actually a profit from net-metered solar systems over the last two years.

All that being said, most utilities charge more than 7.9¢ so there could be a burden (or subsidy) due to net-metered solar. Within this document I will show you mathematically that this burden is insignificant to the wholesale electricity supplier, to the local utility, and to non-solar customers. Once you understand the analysis, or at least believe I'm telling you the truth, you will see that the past claims by utilities that net-metered solar is an operational problem, a financial issue, and a real burden to others is totally unfounded.

Later in this report are four proposed additions to the net-metering law. The intent of the first is to stop the heavy-handedness of MoPEP and AECI and put control in the hands of the board of directors and the staff of the local utilities and the co-ops (and in some instances city councils). The second creates a method whereby a city can utilize the benefits of solar energy at their own facilities without infringing on the amount allocated for citizens and businesses. The third and fourth are consumer protection clauses which are quite simple, but I believe will be very effective.

Please keep in mind I do not represent the solar industry as a whole or any utility — I'm just presenting relevant facts and my opinion on what would make the law more successful toward achieving the goal of allowing the average citizen the ability to create their own carbon free energy and possibly save money in the meantime.

PERCENT OF LOAD GENERATED BY SOLAR CUSTOMERS AT FULL 5% SATURATION

	MoPEP		ROLLA	
Total annual energy in 2022	2,700,000	MWH	330,000	MWH
Peak .	555,000	KW	65,000	KW
	X 5%		X 5%	
5% of peak	27,750	KW	3,250	KW
Solar factor for midwest	X 1400		X 1400	·
Energy generated at full 5% solar		-		
saturation	38,850,000	KWH/YR	4,550,000	KWH/YR
Solar KWH @ 5% saturation	38,850,000	KWH/YR	4,550,000	KWH/YR
Total KWH	÷ 270,000,0000	KWH/YR	÷ 330,000,000	KWH/YR
Reduction in load due to solar	1.44%		1.38%	

Full 5% saturation of net-metered solar results in about 1.4% reduction in total energy used by a city.

In light of this, the effect of net-metered solar energy systems is truly insignificant to the utility and to the wholesale electricity supplier.

To the right is a graph showing MoPEP's generation by fuel in 2022. As you can see adding 1.4% more solar into the mix would obvisouly not be an operational issue to them. Since they sell all their available energy on the market it would not be a financial issue to them either.

Generic Formula to compute % reduction

Net-metered solar at 5% saturation

Peak x 5% = SOLKW

Total KWH for utility

Peak x 5000 = TKWH

Annual Solar Generation

SOLKW x 1400 = SKWH

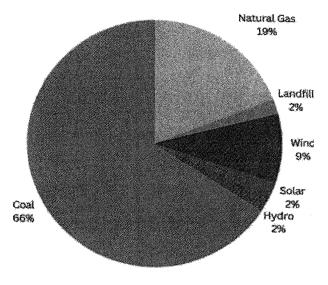
% Solar Compared to Total:

<u>SKWH</u> = <u>SOLKW x 1400</u> = <u>(PEAK x 5%) x 1400</u> = <u>5% x 1400</u> = 1.4%

TKWH PEAK x 5000

PEAK x 5000 5

2022 MoPEP Generation by Fuel



ACTUAL BURDEN OF NET-METERED SOLAR ENERGY SYSTEMS

(For cities served by MoPEP)

The value of solar energy the last 9 months, as determined in the spreadsheet (pages 13-15), is approximately 5.5¢ per/Kwh. In 2022, (pages 9-12) the value was 9.3¢ per/Kwh. The average wholesale value of electricity offset by solar energy in MoPEP cities the last two years has been 7.4¢/Kwh.

If you use 9.0¢ per/Kwh as an average electric rate, then a utility could have lost about 1.6¢ per/Kwh from lost margin on net-metered solar energy systems. At full 5% saturation this will result in 1.4% fewer sales. The average utility serving 6000 customers could see about \$45,000 per year less in margin. [200,000,000/Kwh x 1.4% x 1.6¢/Kwh = \$45,000]. Divide this by 200,000,000/Kwh and you get 2:3¢ per /Kwh. Multiply 2.3¢ by the average household usage of 10,000/Kwh year and you get a \$2,30 per year total burden on each household at full 5% saturation of net-metered solar energy. This is the cost of one soda from Burger King each year and it is hard to believe anyone would gripe about investing \$2.30 per year to promote home-grown clean solar energy in their community.

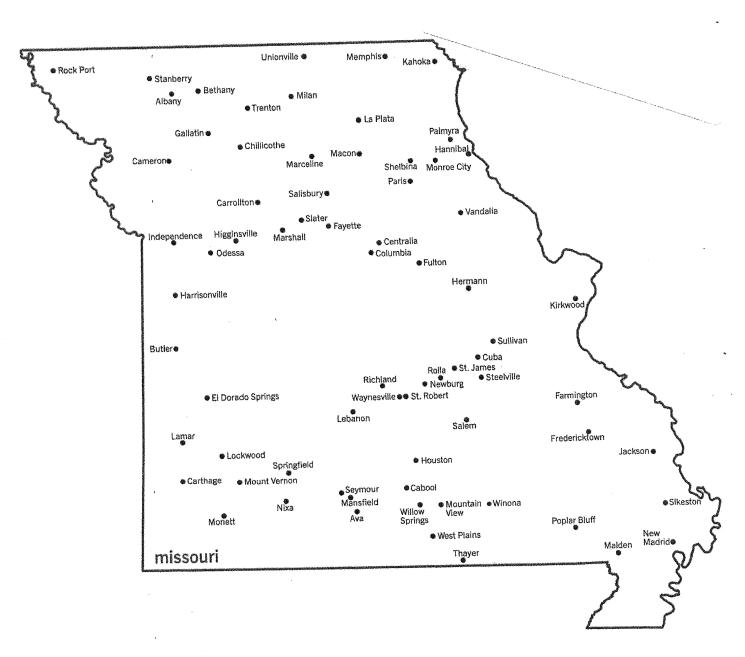
If a city allows or constructs a community solar farm and/or installs solar energy systems at their own facilities, the gains from these efforts would more than offset the possible lost margin from the traditional net-metered systems. In fact, it would be pretty easy for a city to buy everyone in town a soda from the profits on their solar energy efforts if they were allowed to do so.



1 soda per year



Mopep Member Cities



ACTUAL BURDEN OF NET-METERED SOLAR ENERGY SYSTEMS

(For the co-op system served by AECI)

Since the co-op system has the highest peak in the winter, they do not figure any capacity value to solar energy. They will also not likely see the reduction in transmission cost as a value either. Extracting only the hourly market value from the two spreadsheets you arrive at a pure energy value for solar energy systems to be 7.9 ¢/Kwh in 2022 (\$110,259 \div 1397) and 4.3 ¢/Kwh in 2023 (47,158 \div 1110). Since AECI is selling excess energy on the market, all solar energy systems are reducing load which is giving them more to sell during the day when energy is the most valuable. There are no stranded assets due to net-metered solar.

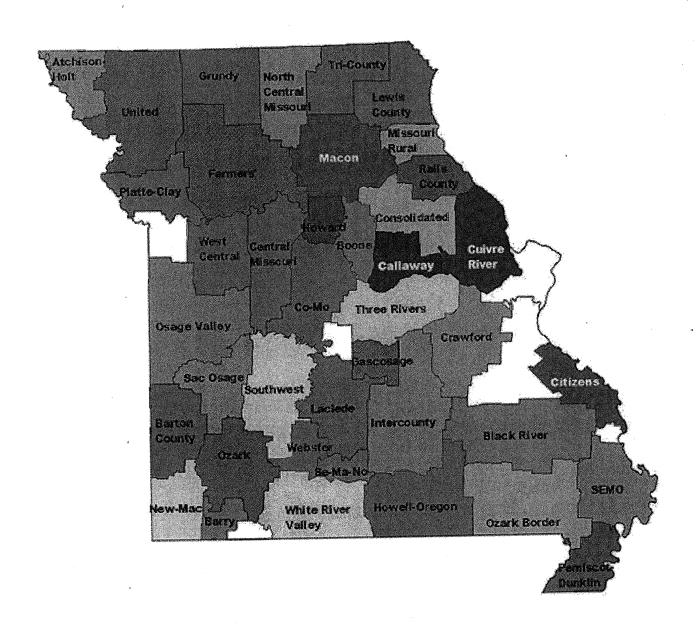
From the studies, the average value of solar energy to the co-op's the last 2 years is 6.1¢/Kwh. Subtract this from the current 9.0¢ rate charged by many co-ops, and you get an average margin of 2.9¢ per Kwh. This is almost twice the margin of the average Mo-PEP city which results in a burden to the non-solar household of \$4.20 per year. That's the cost of a whopper each year.

It is hard to believe anyone would gripe about investing \$4.20 per year to promote home-grown clean solar energy in their community. If a co-op would allow the construction of community solar farms the gains from this effort would more than offset the possible lost margin from the traditional net-metered systems.



1 whopper per year

MISSOURI CO-OPS



PROPOSED ADDITIONS TO THE NET-METERING AND EASY CONNECT ACT

(with commentary)

- A. No wholesale electricity supplier may interfere with the interpretation or the facilitation of this law by any local utility unless there is an exclusivity clause in the contract between the two entities. In this event, the wholesale electricity supplier may established a limit on the total DC nameplate size of all net-metered solar energy systems within a utilities footprint, including any owned by the utility or the city, of no less than 10% of of the utilities peak load the previous calendar year.
 - The Missouri Public Energy Pool (MoPEP) and Associated Electric Cooperative Inc. (AECI) are blocking the municipal utilities and the co-ops from doing any more than the absolute minimum requirements in the law and are dictating to the local utilities how to interpret the law. The law does not restrict a utility from using different methods to achieve the goal (i.e., virtual net metering, community solar, etc..), but the utilities are being told by MoPEP and AECI that they can use only the traditional behind-the-meter method.
 - This change to the law would give the board of directors of local utilities and co-ops, as well as local city councils the ability to truly promote net-metered solar energy systems if they so choose. They could also install such systems on their own facilities and reap the benefits. Many cities are free to use and promote solar energy if they so wish but not cities served by MoPEP, or rural areas served by the co-ops.
 - This proposed change does not alter the local utilities' 5% or 1% obligation in the law but gives them the freedom to do more if they so choose. The freedom is currently blocked by MoPEP and AECI.
 - The 10% minimum cap from the wholesale electricity suppliers is proposed so that a
 city could install a substantial number of systems for their own facilities. When the full
 10% is achieved by the local utility the end result will be a reduction of the annual KWH
 needs of the city by less than 3%.
 - Both MoPEP and AECI are selling all they can generate in the energy market so there
 is no concern with operational issues, financial losses, or stranded assets, as has been
 the claim in the past.

- B. A city and/or a utility may install net-metered solar energy systems at their own facilities, however, these systems cannot be included in the 5% minimum total saturation, or the 1% minimum annual saturation threshold established elsewhere in the law. In the event that a city or utility does have solar energy systems providing power to their facilities, the wholesale electricity supplier will have the right to have them curtail this generation if the supplier has more renewable generation of their own or under contract than what their total load is at the time.
 - The intent is to clear up any confusion about how much solar a city can install for itself
 while not infringing on the ability of local citizens to participate in the program. A city
 can now get federal grant money and cash in lieu of tax credits for the installation of
 solar systems so it is to their benefit to participate in the program.
- C. No utility may charge a new net-metered customer more than 150% of the cost of the materials and labor to establish the interconnect agreement and facilitate the physical interconnect of a solar energy system. A utility must review and return all proposed interconnect agreements within 30 days of receipt.
 - There is currently no actual limit on what a utility could charge for the interconnect of a net-metered system. If a local utility was anti-solar, high interconnect fees is a method they could use to kill the program in their territory.
- D. Any company selling solar energy systems must provide a written proposal to all potential residential customers with an accurate "reduction on the electric bill" calculation based on the future electric rates at the time of the installation with no projections for the future rate increases. This calculation must show the different outputs for panels facing other than south and/or the influence of shade if there is any. Prior to issuing an interconnect agreement a utility must request a copy of the detailed reduction calculation given to the customer, as per the requirements of this law, to assure that it was delivered. At the utility's option they may give feedback to the customer as to the reasonable accuracy of the calculation.
 - Unscrupulous sellers are a major concern with the net-metering program and this
 requirement will help tremendously in separating the truth from the lies. The utility is
 not obligated to review the savings calculation; however, most will likely do this to help
 protect their customers from being scammed. There are several web pages designed
 to do this calculation and it only takes a few moments.

6. %	9	3	8)		JOARO .	TOTAL		1
	Π					l l		
		HOURLY	SOLAR	LOSSES	ENERGY VALUE	VALUE OF		
MONTH	HE	COST	MWH	ADJUSTED	OF SOLAR	SOLAR		
JAN	1	26	0	0.00	-			
JAN	7	39	0	0.00	-			
JAN	8	61	2.64	1.10	177.14			
	9	56	6.16	1.10	379.46			
JAN				1.10	532.40			
JAN	10	. 55	8.8	1.10	745.36			
JAN	11	55	12.32		712.45			
JAN	12	46	14.08	1.10	619.52			
JAN	13	40	14.08	1.10	487.87			
JAN	14	36	12.32	1.10	329.12			
JAN	15	34	8.8	1.10				
JAN	16	36	6.16	1.10	243.94	4 240 22	ENERGY	
JAN	17	42	2.64	1.10	121.97	4,349.22	TRANSMISSION	
JAN	18	56	0	1.10		600.00	CAPACITY VALUE	
JAN	24	27	0	1.10	-	1,000.00	CAFACITI VALUE	
FEB	1	20	0	1.10	-	5,949.22		
FEB	2	19	0	1.10				
FEB	8	55	2.73	1.10	165.17			
FEB	9		6.37	1.10	357.36			
FEB	10	<u> </u>	9.1	1.10	530.53			
FEB	$\frac{10}{11}$		12.74	1.10	686.69			
FEB	12		14.56	1.10	672.67			<u> </u> -
	13		14.56	1.10	608.61			
FEB	14		12.74	1.10	490.49			
FEB			9.1	1.10	320.32			1
FEB	15		6.37	1.10	224.22			
FEB	16		2.73	1.10	105.11	4,161.16	ENERGY	
FEB	17					600.00	TRANSMISSION	
MAR	_ 3		0	1.10		1,000.00	CAPACITY VALUE	
MAR	4		0	1.10		5,761.16		
MAR	ŗ	5 20	0	1.10		3,701.10		
MAR	(5 25	0	1.10				
MAR		7 31	0	1.10			· · · · · · · · · · · · · · · · · · ·	
MAR	- 8	39	3.48	1.10	149.29			
MAR		9 40	8.12	1.10	357.28			
MAR	10	0 44	11.6	1.10	561.44			
MAR	1	1 40	16.24	1.10	714.56			
MAR	1		18.56	1.10	714.56			
MAR			18.56	1.10	632.90			
MAR			16.24		535.92			
			11.6	1.10	370.04			
MAR			8.12	1.10	267.96			
MAR		7 34	3.48	1.10	130.15		ENERGY	
MAR			0	1.10		600.00	TRANSMISSION	
APR		3 7	1 0	1.10		1,000.00	CAPACITY VALUE	
APR		4 7				6,034.10		
APR		5 9	0	1.10		0,004.10		
APR		6 14	0	1.10				
APR		7 20	0	1.10	472.0/	-		
APR		8 48	2.52	1.10	133.00			
APR		9 52	5.04		288.29			
APR		10 54	8.82	1.10	523.9			
		11 49	12.6	1.10	679.1	4		
APR								
APR APR		12 47	16.38	3 1.10	846.8	5		

APR	14	47	17.64	1.10	911.99			
APR	15	48	16.38	1.10	864.86			
APR	16	49	12.6	1.10	679.14			
APR	17	51	8.82	1.10	494.80			
APR	18	52	5.04	1.10	288.29			
APR	19	55	2.52	1.10	152.46	6,774.77	ENERGY	
MAY	4	16	0	1.10	-	600.00	TRANSMISSION	
MAY	5	17	0	1.10	-	1,000.00	CAPACITY VALUE	
MAY	6	20	0	1.10		8,374.77		
MAY	7	22	0	1.10	_			
MAY	8	. 49	2.8	1.10	150.92			
MAY	9	62	5.6	1.10	381.92			
MAY	10	66	9.8	1.10	711.48			
MAY	11	67	14	1.10	1,031.80			
MAY	12	71	18.2	1.10	1,421.42			
MAY	13	76	19.6	1.10	1,638.56		······································	
MAY	14	85	19.6	1.10	1,832,60			
MAY	15	83	18.2	1.10	1,661.66			
MAY	16	88	14	1.10	1,355.20			
MAY	17	95	9.8	1.10	1,024.10			
MAY	18	93	5.6	1.10	572.88			
MAY	19	87	2.8	1.10	267.96	12,050.50	ENERGY	
MAY	20	80	0	1.10	-	600.00	TRANSMISSION	
1,1,1,1				1.10		1,000.00	CAPACITY VALUE	
	\vdash			1.10		13,650.50		
JUN	1	21	0	1.10	_			
JUN	7	20	ō	1.10	-			
JUN	8	44	2.82	1.10	136.49			
JUN	9	57	5.64	1.10	353.63			
JUN	10	64	9.87	1.10	694.85			
JUN	11	78	14.1	1.10	1,209.78			
JUN	12	84	18.33	1.10	1,693.69			
JUN	13	95	19.74	1.10	2,062.83			
JUN	14	102	19.74	1.10	2,214.83			
JUN	15	109	18.33	1.10	2,197.77			
JUN	16	117	14.1	1.10	1,814.67			
JUN	17	120	9.87	1.10	1,302.84			
JUN	18	114	5.64	1.10	707.26			
JUN	19	103	2.82	1.10	319.51	14,708.13	ENERGY	
JUN	20	80	0	1.10	-	600.00	TRANSMISSION	
JUN	21	36	0	1.10	-	1,000.00	CAPACITY VALUE	
JUN	22	32	0	1.10	-	16,308.13		
JUN	23	26	0	1.10	-			
JUL	6	19	0	1.10	-			
JUL	7	21	0	1.10	-			
JUL	8	50	2.86	1.10	157.30			
JUL	9	63	5.72	1.10	396.40			
JUL	10	70	10.01	1.10	770.77			
JUL	11	80	14.3	1.10	1,258.40			
JUL	12	91	18.59	1.10	1,860.86			
JUL	13	100	20.02	1.10	2,202.20			
JUL	14	109	20.02	1.10	2,400.40			
JUL	15	124	18.59	1.10	2,535.68			
JUL	16	133	14.3	1.10	2,092.09			
JUL	17	135	10.01	1.10	1,486.49			
JUL	18	123	5.72	1.10	773.92			
JUL	19	112	2.86	1.10	352.35		ENERGY	
		99	0	1.10	-	600.00	TRANSMISSION	I

JUL	21	42	0	1.10	-	1,000.00	CAPACITY VALUE	
AUG	4	18	0	1.10		17,886.84		
AUG	5	19	0	1.10		17,000.01		
AUG	8	58	2.78	1.10	177.36			
AUG	9	72	5.56	1.10	440.35			
AUG	10	83	9.73	1.10	888.35			
AUG	11	92	13.9	1.10	1,406.68			
AUG	12	101	18.07	1.10	2,007.58			
AUG	13	108	19.46	1.10	2,311.85			
AUG	14	117	19.46	1.10	2,504.50		· · · · · · · · · · · · · · · · · · ·	
AUG	15	123	18.07	1.10	2,444.87			
AUG	16	129	13.9	1.10	1,972.41			
AUG	17	131	9.73	1.10	1,402.09			
AUG	18	125	5.56	1.10	764.50			
AUG	19	116	2.78	1.10	354.73	16,675.27	ENERGY	
AUG	20	103	0	1.10	-	600.00	TRANSMISSION	
SEP	3	13	0	1.10	_	1,000.00	CAPACITY VALUE	
	4	13	0	1.10	-	18,275.27		
SEP	5	14	0	1.10	-	20,270127		
SEP SEP	7	21	0	1.10	 			
SEP	8	46	2.52	1.10	127.51			
SEP	9	57	5.04	1.10	316.01			
SEP	10	66	8.82	1.10	640.33			
SEP	11	70	12.6	1.10	970.20			
SEP	12	80	16.38	1.10	1,441.44			
SEP	13	89	17.64	1.10	1,726.96			
SEP	14	100	17.64	1.10	1,940.40			
SEP	15	107	16.38	1.10	1,927.93			
SEP	16	113	12.6	1.10	1,566.18			
SEP	17	116	8.82	1.10	1,125.43			
SEP	18	108	5.04	1.10	598.75			
SEP	19	99	2.52	1.10	274.43	12,655.57	ENERGY	
SEP	20	36	0	1.10	-	600.00	TRANSMISSION	
OCT	4	31	0	1.10	-	1,000.00	CAPACITY VALUE	
OCT	5	38	0	1.10	-	14,255.57		
OCT	6	42	0	1.10	_			
OCT	1 7	49	0	1.10	_			
OCT	8	51	3.33	1.10	186.81			
OCT	9	54	7.77	1.10	461.54			
OCT	10	76	11.1	1.10	927.96			
OCT	11	67	15.54	1.10	1,145.30			
OCT	12	60	17.76	1.10	1,172.16			
OCT	13	58	17.76	1.10	1,133.09			
OCT	14	. 60	15.54	1.10	1,025.64			
OCT	15	61	11.1	1.10	744.81			
OCT	16	63	7.77	1.10	538.46			
OCT	17	62	3.33	1.10	227.11	7,562.87	ENERGY	
OCT	18		0	1.10	-	600.00	TRANSMISSION	
NOV	4	30	0	1.10	-	1,000.00	CAPACITY VALUE	
NOV	5	l	0	1.10	-	9,162.87		
NOV	6		0	1.10	-			
NOV	7		1 0	1.10	_			
NOV	8		2.82	1.10	164.41			
NOV	9		6.58	1.10	383.61			
NOV	10		9.4	1.10	641.08			
NOV	11		13.16	1.10	839.61			
NOV	12		15.04	1.10	843.74	<u> </u>		
1,101	1		1 -2.0 /				L.,	

			·					
NOV	13	46	15.04	1.10	761.02			
NOV	14	43	13.16	1.10	622.47			
NOV	15	43	9.4	1.10	444.62			
NOV	16	45	6.58	1.10	325.71			
NOV	17	53	2.82	1.10	164.41	5,190.68	ENERGY	
NOV	18	70	0	1.10	-	600.00	TRANSMISSION	
DEC	4	46	0	1.10	_	1,000.00	CAPACITY VALUE	
DEC	5	51	0	1.10		6,790.68		
DEC	6	59	0	1.10	-			
DEC	7	65	0	1.10	_			
DEC	8	71	2.46	1.10	192.13			
DEC	9	69	5.74	1.10	435.67			
DEC	10	71	8.2	1.10	640.42			
DEC	11	69	11.48	1.10	871.33			
DEC	12	59	13.12	1.10	851.49			
DEC	13	56	13.12	1.10	808.19			
DEC	14	53	11.48	1.10	669.28			
DEC	15	51	8.2	1.10	460.02			
DEC	16	51	5.74	1.10	322.01			
DEC	17	59	2.46	1.10	159.65	5,410.20	ENERGY	
DEC	18	77	0	1.10	-	600.00	TRANSMISSION	
		f	70		-	1,000.00	CAPACITY VALUE	
			1397		110,259.31	7,010.20		
						129,459.31		
				<u> </u>				

AVERAGE VALUE OF SOLAR ENERGY \$129459.31 ÷ 1397 MWH = \$92.67/MWH = 9.3¢/KWH

Transmission charge of \$600/mo is a rough estimate. Using \$1000 per MW/month as a reasonable capacity value for solar energy.

HE - Hour ending

Hourly Cost- From MoPEP billing sheets

Solar MWH - Approximate production of a 1 MW DC solar energy system that hour

Losses Adjusted - Increases value of solar energy due to less transformer and line losses

Asset Rate - From MoPEP billing sheets

HOURTH HE COST MWH ADJUSTED OF SOLAR SOLAR	j.		5	- 5		10.00	~~ ~~	And the second s	
MONTH HE							TOTAL		
JAN 1 26						. 1	1		
JAN 7 39 0 0 0.00 - 1 JAN 8 42 2.64 1.10 121.97 JAN 9 40 6.16 1.10 271.04 JAN 10 41 8.8 1.10 396.88 JAN 11 39 12.32 1.10 528.33 JAN 13 32 14.08 1.10 526.99 JAN 13 32 14.08 1.10 285.62 JAN 14 31 12.32 1.10 420.11 JAN 15 29 8.8 1.10 280.72 JAN 16 30 6.16 1.10 203.28 JAN 17 33 2.64 1.10 95.83 JAN 17 33 2.64 1.10 99.83 3,340.57 JAN 18 41 0 1.10 - 600.00 TRANSMISSION JAN 24 27 0 1.10 - 1,000.00 CAPACITY VALUE FEB 17 22 0 0 1.10 - 4,940.57 FEB 9 31 6.37 1.10 291.72 FEB 9 31 6.37 1.10 217.22 FEB 10 32 9.1 1.10 320.32 FEB 11 30 12.74 1.10 420.42 FEB 12 26 14.56 1.10 446.42 FEB 13 24 14.56 1.10 446.42 FEB 13 24 14.56 1.10 383.83 FEB 15 22 9.1 1.10 583.83 FEB 16 22 6.37 1.10 59.07 FEB 17 23 2.73 1.10 99.00 FEB 18 33 17 0 1.10 1.10 - 600.00 TRANSMISSION FEB 17 23 2.73 1.10 10 420.42 FEB 18 24 14.56 1.10 420.42 FEB 19 32 4 14.56 1.10 420.42 FEB 18 24 14.56 1.10 383.83 FEB 17 23 2.73 1.10 99.00 FEB 17 23 2.73 1.10 99.00 FEB 17 23 2.73 1.10 99.00 FEB 17 23 2.73 1.10 50.00 FEB 18 24 41.10 44.66 FEB 18 24 41.10 50.00 FEB 18 24 61.10 50.00 FEB 18 30 31.00 FEB 18 40 40 50.00 FEB 18	MONTH	HE	COST	MWH	ADJUSTED	OF SOLAR	SOLAR		
JAN 8 42 2,64 1.10 121.97	JAN	1				-	<u> </u>		
JAN 9 40 6.16 1.10 271.04	JAN								
JAN 10	JAN		42	2.64	1.10	121.97			
JAN 11 39	JAN	9	40	6.16	1.10	271.04			
JAN 12 34 14.08 1.10 526.59	JAN	10	41	8.8	1.10	396.88			
AN	JAN	11	39	12.32	1.10	528.53			
JAN 14 31 12.32 1.10 420.11	JAN	12	34	14.08	1.10				
JAN	JAN	13	32	14.08	1.10				
JAN 16 30 6.16 1.10 203.28	JAN			12.32					
1AN 17 33 2.64 1.10 95.83 3.340.57 ENERGY 1AN 18 41 0 1.10 - 600.00 TRANSMISSION 1AN 24 27 0 1.10 - 1,000.00 CAPACITY VALUE FEB 1 20 0 1.10 - 4,940.57 FEB 7 32 0 1.10 - 99.10 FEB 8 33 2.73 1.10 99.10 FEB 9 31 6.37 1.10 217.22 FEB 10 32 9.1 1.10 320.32 FEB 11 30 12.74 1.10 420.42 FEB 12 26 14.56 1.10 416.42 FEB 13 24 14.56 1.10 338.31 FEB 14 22 12.74 1.10 308.31 FEB 15 22 9.1 1.10 220.22 FEB 16 22 6.37 1.10 154.15 FEB 17 23 2.73 1.10 69.07 2,609.61 ENERGY FEB 17 23 2.73 1.10 69.07 2,609.61 ENERGY FEB 17 23 2.73 1.10 69.07 2,609.61 MAR 3 17 0 1.10 - 500.00 TRANSMISSION MAR 4 18 0 1.10 - 1,000.00 CAPACITY VALUE MAR 5 20 0 1.10 - 4,209.61 MAR 6 25 0 1.10 - 255.82 MAR 9 32 3.48 1.10 122.50 MAR 9 32 3.48 1.10 122.50 MAR 10 33 11.6 1.10 421.08 MAR 11 29 16.24 1.10 530.82 MAR 13 26 18.56 1.10 530.82 MAR 14 25 16.24 1.10 306.24 MAR 15 24 8.12 1.10 214.37 MAR 16 24 8.12 1.10 214.37 MAR 16 24 8.12 1.10 306.24 MAR 17 24 3.48 1.10 91.87 3,468.17 ENERGY APR 7 7 0 1.10 - 5,068.17 APR 7 7 7 0 1.10 - 5,068.17 APR 7 7 7 7 7 7 7 APR 7 7 7 7 7 7 7 7 7 APR 9 30 5.04 1.10 366.34 APR 11 28 12.6 1.10 388.08 APR 12 26 16.38 1.10 468.47	JAN	15							
JAN 18 41 0 1.10 - 600.00 TRANSMISSION JAN 24 27 0 1.10 - 1,000.00 CAPACITY VALUE FEB 1 20 0 1.10 - 4,940.57 FEB 7 32 0 1.10 - 4,940.57 FEB 8 33 2.73 1.10 99.10 FEB 9 31 6.37 1.10 217.22 FEB 10 32 9.1 1.10 320.32 FEB 11 30 12.74 1.10 420.42 FEB 12 26 14.56 1.10 384.38 FEB 12 26 14.56 1.10 384.38 FEB 14 22 12.74 1.10 308.31 FEB 15 22 9.1 1.10 320.32 FEB 16 22 6.37 1.10 384.38 FEB 17 23 2.73 1.10 69.07 2,609.61 ENERGY ENERGY FEB 17 23 2.75 2.10 2.75	JAN	16	30						
JAN 24 27	JAN	17	33	2.64		95.83			
FEB 1 20 0 1.10 - 4,940.57 FEB 7 32 0 1.10 - 99.10 FEB 9 31 6.37 1.10 217.22 FEB 10 32 9.1 1.10 320.32 FEB 11 30 12.74 1.10 420.42 FEB 12 26 14.56 1.10 416.42 FEB 13 24 14.56 1.10 384.33 FEB 15 22 9.1 1.10 220.22 FEB 16 22 6.37 1.10 20.33 FEB 17 23 2.73 1.10 69.07 2,609.61 FEB 18 10 2 2 6.37 1.10 154.15 FEB 16 22 6.37 1.10 154.15 FEB 17 23 2.73 1.10 69.07 2,609.61 FEB 18 0 1.10 - 1,000.00 CAPACITY VALUE MAR 3 17 0 1.10 - 1,000.00 CAPACITY VALUE MAR 6 25 0 1.10 - 4,209.61 MAR 7 31 0 1.10 - 4,209.61 MAR 8 32 3.48 1.10 125.50 MAR 9 32 8.12 1.10 285.82 MAR 10 33 11.6 1.10 421.08 MAR 11 29 16.24 1.10 530.82 MAR 11 29 16.24 1.10 530.82 MAR 12 26 18.56 1.10 530.82 MAR 13 26 18.56 1.10 530.82 MAR 14 25 16.24 1.10 306.24 MAR 15 24 11.6 1.10 306.24 MAR 16 24 8.12 1.10 244.37 MAR 17 24 3.48 1.10 1.43.7 APR 4 7 0 1.10 - 600.00 TRANSMISSION APR 5 9 9 0 1.10 - 600.00 TRANSMISSION APR 6 14 0 1.10 - 500.00 TRANSMISSION APR 7 20 0 1.10 - 500.00 TRANSMISSION APR 9 30 5.04 1.10 530.82 APR 9 30 5.04 1.10 530.82 APR 9 30 5.04 1.10 - 500.00 TRANSMISSION APR 9 7 20 0 1.10 - 500.00 TRANSMISSION APR 9 9 30 5.04 1.10 56.32 APR 9 9 30 5.04 1.10 56.32 APR 10 33 8.82 1.10 380.83 APR 11 28 12.6 1.10 380.83	JAN	18		0		-			
FEB 7 32 0 1.10 99.10 FEB 8 33 2.73 1.10 99.10 FEB 9 31 6.37 1.10 99.10 FEB 10 32 9.1 1.10 320.32 FEB 11 30 12.74 1.10 420.42 FEB 12 26 14.56 1.10 420.42 FEB 13 24 14.56 1.10 384.38 FEB 14 22 12.74 1.10 308.31 FEB 15 22 9.1 1.10 220.22 FEB 16 22 6.37 1.10 154.15 FEB 17 23 2.73 1.10 FEB 17 23 2.73 1.10 FEB 17 23 2.73 1.10 FEB 18 0 1.10 - 600.00 TRANSMISSION FEB 18 0 17 23 2.73 1.10 FEB 19 0 1.10 - 4,209.61 FEB 19 0 1.10 - 4,209.61 FEB 19 0 1.10 FE	JAN	24	27	0	1.10	-	_	CAPACITY VALUE	
FEB 8 33 2.73 1.10 99.10 FEB 9 31 6.37 1.10 217.22 FEB 10 32 9.1 1.10 320.32 FEB 11 30 12.74 1.10 420.42 FEB 12 26 14.56 1.10 384.38 FEB FEB 14 22 12.74 1.10 308.31 FEB FEB 15 22 9.1 1.10 220.22 FEB FEB 16 22 6.37 1.10 154.15 FERGY FEB 16 22 6.37 1.10 -600.00 TRANSMISSION MAR 3 17 0 1.10 - 4,209.61 ENERGY MAR 18 0 1.10 - 4,209.61 ENERGY MAR 5 20 0 1.10 - 4,209.61 ENERGY MAR 6	FEB	1	20	0	1.10		4,940.57		
FEB 9 31 6.37 1.10 217.22 FEB 10 32 9.1 1.10 320.32 FEB 11 30 12.74 1.10 420.42 FEB 12 26 14.56 1.10 416.42 FEB 13 24 14.56 1.10 384.38 FEB 14 22 12.74 1.10 384.38 FEB 15 22 9.1 1.10 220.22 FEB 16 22 6.37 1.10 154.15 FEB 17 23 2.73 1.10 69.07 2,609.61 ENERGY FEB 17 23 2.73 1.10 69.07 2,609.61 ENERGY FEB 17 23 2.73 1.10 69.07 2,609.61 FENERGY FEB 17 2,609.61 FEB 17 2,609	FEB	7	Additional Company of the Company of		1	-			
FEB 10 32 9.1 1.10 320.32 FEB 11 30 12.74 1.10 420.42 FEB 12 26 14.56 1.10 416.42 FEB 13 24 14.56 1.10 384.38 FEB 14 22 12.74 1.10 308.31 FEB 15 22 9.1 1.10 220.22 FEB 16 22 6.37 1.10 154.15 FEB 17 23 2.73 1.10 69.07 2,609.61 ENERGY FEB 17 23 2.73 1.10 69.07 2,609.61 FOR ENERGY FEB 17 23 2.73 1.10 69.07 2,609.61 FOR ENERGY FEB 17 23 2.73 1.10 69.07 2,609.61 FOR ENERGY FEB 17 23 2.73 1.10 69.07 2,609.61 FOR ENERGY FEB 17 23 2.73 1.10 69.07 2,609.61 FOR ENERGY FEB 17 23 2.73 1.10 69.07 2,609.61 FOR ENERGY FEB 17 23 2.73 1.10 69.07 2,609.61 FOR ENERGY FEB 17 23 2.73 1.10 69.07 2,609.61 FOR ENERGY FEB 17 23 2.73 1.10 69.07 2,609.61 FOR ENERGY FEB 17 23 2.73 1.10 69.07 2,609.61 FOR ENERGY FEB 17 23 2.73 1.10 69.07 2,609.61 FOR ENERGY FEB 17 23 2.73 1.10 69.07 2,609.61 FOR ENERGY FEB 17 23 2.73 1.10 69.07 2,609.61 FOR ENERGY FEB 17 23 2.73 1.10 1.10 69.07 2,609.61 FOR ENERGY FEB 17 2.73 1.10 1.10 69.07 2,609.61 FOR ENERGY FEB 17 2.73 1.10 2.73 1.73 1.10 2.73 1.73 1.10 2.73 1.73 1.10 2.73 1.73 1.10 2.73 1.73 1.10 2.73 1.73 1.10 2.73 1.73 1.10 2.73 1.73 1.10 2.73 1.73 1	FEB	1	33	2.73					
FEB 11 30 12.74 1.10 420.42 FEB 12 26 14.56 1.10 416.42 FEB 13 24 14.56 1.10 384.38 FEB 14 22 12.74 1.10 308.31 FEB 15 22 9.1 1.10 220.22 FEB 15 22 9.1 1.10 154.15 FEB 17 23 2.73 1.10 69.07 2,609.61 ENERGY FEB 17 23 2.73 1.10 69.07 2,609.61 ENERGY FEB 17 23 2.73 1.10 69.07 2,609.61 FERGY FEB 17 2 3 2.73 1.10 69.07 2,609.61 FERGY FEB 17 2 3 2.73 1.10 69.07 2,609.61 FERGY FEB 17 2 3 2.73 1.10 69.07 2,609.61 FERGY FEB 17 2 3 2.73 1.10 69.07 2,609.61 FEB 17 2 2 6 0 1.10 - 4,209.61 FEB 17 2 2 6 0 1.10 - 4,209.61 FEB 17 2 2 6 1.10 1.10 - 4,209.61 FEB 17 2 2 6 18.56 1.10 518.06 FEB 17 2 2 6 18.56 1.10 306.24 FEB 17 2 4 3.48 1.10 214.37 FEB 17 2 4 3.48 1.10 - 5,068.17 FEB 17 2 4 3.48 1.10 F	FEB	9	31	6.37	1.10				
FEB 12 26 14.56 1.10 416.42 FEB 13 24 14.56 1.10 384.38 FEB 14 22 12.74 1.10 308.31 FEB 15 22 9.1 1.10 220.22 FEB 16 22 6.37 1.10 154.15 FEB 17 23 2.73 1.10 69.07 2,609.61 ENERGY FEB 17 23 2.73 1.10 69.07 2,609.61 ENERGY FEB 18 0 1.10 - 600.00 TRANSMISSION MAR 18 0 1.10 - 1,000.00 CAPACITY VALUE MAR 5 20 0 1.10 - 4,209.61 MAR 6 25 0 1.10 - 4,209.61 MAR 7 31 0 1.10 - 4,09.61 MAR 8 32 3.48 1.10 122.50 MAR 9 32 8.12 1.10 225.82 MAR 10 33 11.6 1.10 421.08 MAR 11 29 16.24 1.10 518.06 MAR 12 26 18.56 1.10 530.82 MAR 13 26 18.55 1.10 306.24 MAR 14 25 16.24 1.10 306.24 MAR 15 24 11.6 1.10 306.24 MAR 16 24 8.12 1.10 214.37 MAR 17 24 3.48 1.10 91.87 3,468.17 ENERGY APR 3 7 0 1.10 - 600.00 TRANSMISSION APR 6 14 0 1.10 - 600.00 TRANSMISSION APR 7 7 20 0 1.10 - 5,068.17 APR 8 23 2.52 1.10 63.76 APR 9 30 5.04 1.10 - 5,068.17 APR 10 33 8.82 1.10 166.32 APR 11 28 12.6 11.03 38.82 APR 11 28 12.6 11.03 38.80 APR 11 28 12.6 11.03 388.80 APR 11 28 12.6 11.03 388.80 APR 11 28 12.6 11.00 388.80 APR 11 28 12.6 11.10 388.80 APR 12 26 16.38 1.10 468.47 APR 13 28 12.6 11.10 388.80 APR 14 25 16.38 1.10 468.47 APR 15 26 16.38 1.10 468.47 APR 16 14 14 14 14 14 14 14 14 14 14	FEB	10	32	9.1	1.10	320.32			
FEB 13 24 14.56 1.10 384.38 FEB 14 22 12.74 1.10 308.31 FEB 15 22 9.1 1.10 154.15 FEB 16 22 6.37 1.10 154.15 FEB 17 23 2.73 1.10 69.07 2,609.61 ENERGY FEB 17 23 2.73 1.10 69.07 2,609.61 ENERGY FEB 17 23 2.73 1.10 69.07 2,609.61 ENERGY FEB 17 23 2.73 1.10 69.07 2,609.61 ENERGY FEB 17 23 2.73 1.10 69.07 2,609.61 ENERGY FEB 17 23 2.73 1.10 69.07 2,609.61 ENERGY FEB 17 23 2.73 1.10 69.07 2,609.61 ENERGY FEB 17 23 2.73 1.10 69.07 2,609.61 ENERGY FEB 17 23 2.73 1.10 69.07 2,609.61 ENERGY FEB 17 23 2.73 1.10 FEB 17 2,000.00 CAPACITY VALUE FEB 17 2 20 0 1.10 - 4,209.61 FEB 17 2 20 0 1.10 - 4,209.61 FEB 17 2 20 0 1.10 FEB 17 2 20 0 1.20 FEB 17 2 20 20 FEB 17	FEB	11	30	12.74	1.10	420.42			
FEB 14 22 12.74 1.10 308.31 FEB 15 22 9.1 1.10 220.22	FEB	12	26	14.56	1.10	416.42			
FEB 15 22 9.1 1.10 220.22 FEB 16 22 6.37 1.10 154.15 FEB 17 23 2.73 1.10 69.07 2,609.61 ENERGY FEB 17 23 2.73 1.10 - 600.00 TRANSMISSION FEB 17 23 1.10 - 1,000.00 CAPACITY VALUE FEB 18 18 0 1.10 - 1,000.00 CAPACITY VALUE FEB 18 18 0 1.10 - 1,000.00 CAPACITY VALUE FEB 18 18 18 0 1.10 - 4,209.61 FEB 18 18 18 18 18 18 18 18 18 18 18 18 18	FEB	13	24	14.56	1.10	384.38			
FEB 16 22 6.37 1.10 154.15 FEB 17 23 2.73 1.10 69.07 2,609.61 ENERGY FEB 17 23 2.73 1.10 - 600.00 TRANSMISSION FEB 18 20 1.10 - 1,000.00 CAPACITY VALUE FEB 18 20 1.10 - 4,209.61 FEB 18 20 1.10 - 4,209.61 FEB 18 20 1.10 FEB 18 20 1.10	FEB	14	22	12.74	1.10	308.31			
FEB 17 23 2.73 1.10 69.07 2,609.61 ENERGY MAR 3 17 0 1.10 - 600.00 TRANSMISSION MAR 4 18 0 1.10 - 1,000.00 CAPACITY VALUE MAR 5 20 0 1.10 - 4,209.61 MAR 6 25 0 1.10 - 4,209.61 MAR 7 31 0 1.10 600.00 MAR 8 32 3.48 1.10 122.50 MAR 9 32 8.12 1.10 285.82 MAR 10 33 11.6 1.10 421.08 MAR 11 29 16.24 1.10 518.06 MAR 12 26 18.56 1.10 530.82 MAR 13 26 18.56 1.10 530.82 MAR 14 25 16.24 1.10 366.24 MAR 15 24 11.6 1.10 306.24 MAR 16 24 8.12 1.10 306.24 MAR 17 24 3.48 1.10 91.87 MAR 17 24 3.48 1.10 91.87 APR 3 7 0 1.10 - 600.00 TRANSMISSION APR 6 14 0 1.10 - 1,000.00 CAPACITY VALUE APR 7 20 0 1.10 - 5,068.17 APR 8 23 2.52 1.10 63.76 APR 9 30 5.04 1.10 166.32 APR 10 33 8.82 1.10 380.08 APR 11 28 12.6 1.10 380.08 APR 11 28 12.6 1.10 330.01 APR 10 33 8.82 1.10 320.17 APR 11 28 12.6 1.10 380.08 APR 11 28 12.6 1.10 380.08 APR 11 28 12.6 1.10 380.08	FEB	15	22	9.1	1.10	220.22			
MAR 3 17 0 1.10 - 600.00 TRANSMISSION MAR 4 18 0 1.10 - 1,000.00 CAPACITY VALUE MAR 5 20 0 1.10 - 4,209.61 MAR 6 25 0 1.10 - MAR 7 31 0 1.10 - MAR 8 32 3.48 1.10 122.50 MAR 10 33 11.6 1.10 421.08 MAR 11 29 16.24 1.10 518.06 MAR 12 26 18.56 1.10 530.82 MAR 13 26 18.56 1.10 530.82 MAR 14 25 16.24 1.10 446.60 MAR 15 24 11.6 1.10 446.60 MAR 16 24 8.12 1.10 306.24 MAR 17 24 3.48 1.10 91.87 3,468.17 MAR 17 24 3.48 1.10 91.87 3,468.17 APR 4 7 0 1.10 - 600.00 TRANSMISSION APR 4 7 0 1.10 - 600.00 TRANSMISSION APR 5 9 0 1.10 - 5,068.17 APR 6 14 0 1.10 - 5,068.17 APR 7 20 0 1.10 - 5,068.17 APR 8 23 2.52 1.10 63.76 APR 9 30 5.04 1.10 166.32 APR 10 33 8.82 1.10 380.88 APR 11 28 12.6 1.10 380.80 APR 11 28 12.6 1.10 380.80 APR 11 28 12.6 1.10 338.08 APR 11 28 12.6 1.10 380.80	FEB	16	22	6.37	1.10				
MAR 4 18 0 1.10 - 1,000.00 CAPACITY VALUE MAR 5 20 0 1.10 - 4,209.61 MAR 6 25 0 1.10 - - MAR 7 31 0 1.10 - - MAR 8 32 3.48 1.10 122.50 - MAR 9 32 8.12 1.10 285.82 - MAR 10 33 11.6 1.10 421.08 - MAR 11 29 16.24 1.10 518.06 - MAR 11 29 16.24 1.10 530.82 - MAR 12 26 18.56 1.10 530.82 - MAR 13 26 18.56 1.10 446.60 - MAR 15 24 11.0 306.24 - MAR 16	FEB	17	23	2.73	1.10	69.07	2,609.61		
MAR 5 20 0 1.10 - 4,209.61 MAR 6 25 0 1.10	MAR	3	1'7	0	1.10		600.00		
MAR 6 25 0 1.10 -	MAR	4	18	Q	1.10	-	1,000.00	CAPACITY VALUE	
MAR 7 31 0 1.10 - MAR 8 32 3.48 1.10 122.50 MAR 9 32 8.12 1.10 285.82 MAR 10 33 11.6 1.10 421.08 MAR 11 29 16.24 1.10 518.06 MAR 12 26 18.56 1.10 530.82 MAR 13 26 18.56 1.10 530.82 MAR 14 25 16.24 1.10 446.60 MAR 14 25 16.24 1.10 306.24 MAR 15 24 11.6 1.10 306.24 MAR 16 24 8.12 1.10 214.37 MAR 17 24 3.48 1.10 91.87 3,468.17 ENERGY APR 3 7 0 1.10 - 600.00 TRANSMISSION APR	MAR	5	20	0	1.10	-	4,209.61		
MAR 8 32 3.48 1.10 122.50 MAR 9 32 8.12 1.10 285.82 MAR 10 33 11.6 1.10 421.08 MAR 11 29 16.24 1.10 518.06 MAR 12 26 18.56 1.10 530.82 MAR 13 26 18.56 1.10 530.82 MAR 14 25 16.24 1.10 446.60 MAR 15 24 11.6 1.10 306.24 MAR 16 24 8.12 1.10 214.37 MAR 17 24 3.48 1.10 91.87 3,468.17 ENERGY APR 3 7 0 1.10 - 600.00 TRANSMISSION APR 4 7 0 1.10 - 1,000.00 CAPACITY VALUE APR 5 9 0 1.10 - <td>MAR</td> <td>6</td> <td>25</td> <td>0</td> <td>1.10</td> <td>-</td> <td></td> <td>•</td> <td></td>	MAR	6	25	0	1.10	-		•	
MAR 9 32 8.12 1.10 285.82 MAR 10 33 11.6 1.10 421.08 MAR 11 29 16.24 1.10 518.06 MAR 12 26 18.56 1.10 530.82 MAR 13 26 18.56 1.10 530.82 MAR 14 25 16.24 1.10 446.60 MAR 15 24 11.6 1.10 306.24 MAR 16 24 8.12 1.10 214.37 MAR 17 24 3.48 1.10 91.87 3,468.17 ENERGY APR 3 7 0 1.10 - 600.00 TRANSMISSION APR 4 7 0 1.10 - 1,000.00 CAPACITY VALUE APR 5 9 0 1.10 - 5,068.17 APR 6 14 0 1.10 <td>MAR</td> <td>7</td> <td>31</td> <td>0</td> <td>1.10</td> <td>_</td> <td></td> <td></td> <td></td>	MAR	7	31	0	1.10	_			
MAR 10 33 11.6 1.10 421.08 MAR 11 29 16.24 1.10 518.06 MAR 12 26 18.56 1.10 530.82 MAR 13 26 18.56 1.10 530.82 MAR 14 25 16.24 1.10 446.60 MAR 15 24 11.6 1.10 306.24 MAR 16 24 8.12 1.10 214.37 MAR 17 24 3.48 1.10 91.87 3,468.17 ENERGY APR 3 7 0 1.10 - 600.00 TRANSMISSION APR 4 7 0 1.10 - 1,000.00 CAPACITY VALUE APR 5 9 0 1.10 - 5,068.17 APR 6 14 0 1.10 - - APR 7 20 0 <	MAR	8	32	3,48	1.10	122.50			
MAR 11 29 16.24 1.10 518.06 MAR 12 26 18.56 1.10 530.82 MAR 13 26 18.56 1.10 530.82 MAR 14 25 16.24 1.10 446.60 MAR 15 24 11.6 1.10 306.24 MAR 16 24 8.12 1.10 214.37 MAR 17 24 3.48 1.10 91.87 3,468.17 ENERGY APR 3 7 0 1.10 - 600.00 TRANSMISSION APR 4 7 0 1.10 - 1,000.00 CAPACITY VALUE APR 5 9 0 1.10 - 5,068.17 APR 6 14 0 1.10 - - APR 7 20 0 1.10 - - APR 9 30 5.04 </td <td>MAR</td> <td>9</td> <td>32</td> <td>8.12</td> <td>1.10</td> <td></td> <td></td> <td></td> <td></td>	MAR	9	32	8.12	1.10				
MAR 12 26 18.56 1.10 530.82 MAR 13 26 18.56 1.10 530.82 MAR 14 25 16.24 1.10 446.60 MAR 15 24 11.6 1.10 306.24 MAR 16 24 8.12 1.10 214.37 MAR 17 24 3.48 1.10 91.87 3,468.17 ENERGY APR 3 7 0 1.10 - 600.00 TRANSMISSION APR 4 7 0 1.10 - 1,000.00 CAPACITY VALUE APR 5 9 0 1.10 - 5,068.17 APR 6 14 0 1.10 - - APR 7 20 0 1.10 - - APR 9 30 5.04 1.10 63.76 - APR 10 33	MAR	10	33	11.6	1.10	421.08			
MAR 12 26 18.56 1.10 530.82 MAR 13 26 18.56 1.10 530.82 MAR 14 25 16.24 1.10 446.60 MAR 15 24 11.6 1.10 306.24 MAR 16 24 8.12 1.10 214.37 MAR 17 24 3.48 1.10 91.87 3,468.17 ENERGY APR 3 7 0 1.10 - 600.00 TRANSMISSION APR 4 7 0 1.10 - 1,000.00 CAPACITY VALUE APR 5 9 0 1.10 - 5,068.17 APR 6 14 0 1.10 - - APR 7 20 0 1.10 - - APR 9 30 5.04 1.10 166.32 - APR 10 33	MAR	11	. 29	16.24	1.10	518.06			
MAR 13 26 18.56 1.10 530.82 MAR 14 25 16.24 1.10 446.60 MAR 15 24 11.6 1.10 306.24 MAR 16 24 8.12 1.10 214.37 MAR 17 24 3.48 1.10 91.87 3,468.17 ENERGY APR 3 7 0 1.10 - 600.00 TRANSMISSION APR 4 7 0 1.10 - 1,000.00 CAPACITY VALUE APR 5 9 0 1.10 - 5,068.17 APR 6 14 0 1.10 - - APR 7 20 0 1.10 - - APR 8 23 2.52 1.10 63.76 - APR 10 33 8.82 1.10 320.17 - APR 11	<u></u>	12	26	18.56	1.10	530.82			
MAR 14 25 16.24 1.10 446.60 MAR 15 24 11.6 1.10 306.24 MAR 16 24 8.12 1.10 214.37 MAR 17 24 3.48 1.10 91.87 3,468.17 ENERGY APR 3 7 0 1.10 - 600.00 TRANSMISSION APR 4 7 0 1.10 - 1,000.00 CAPACITY VALUE APR 5 9 0 1.10 - 5,068.17 APR 6 14 0 1.10 - - APR 7 20 0 1.10 - - APR 8 23 2.52 1.10 63.76 - APR 9 30 5.04 1.10 166.32 - APR 10 33 8.82 1.10 388.08 - APR		-		18.56	1.10	530.82			
MAR 15 24 11.6 1.10 306.24 MAR 16 24 8.12 1.10 214.37 MAR 17 24 3.48 1.10 91.87 3,468.17 ENERGY APR 3 7 0 1.10 - 600.00 TRANSMISSION APR 4 7 0 1.10 - 1,000.00 CAPACITY VALUE APR 5 9 0 1.10 - 5,068.17 APR 6 14 0 1.10 - - APR 7 20 0 1.10 - - - APR 8 23 2.52 1.10 63.76 - - APR 9 30 5.04 1.10 166.32 - APR 10 33 8.82 1.10 388.08 - APR 12 26 16.38 1.10 468.47	MAR	14			1.10	446.60			
MAR 17 24 3.48 1.10 91.87 3,468.17 ENERGY APR 3 7 0 1.10 - 600.00 TRANSMISSION APR 4 7 0 1.10 - 1,000.00 CAPACITY VALUE APR 5 9 0 1.10 - 5,068.17 APR 6 14 0 1.10 - - APR 7 20 0 1.10 - - APR 8 23 2.52 1.10 63.76 - APR 9 30 5.04 1.10 166.32 - APR 10 33 8.82 1.10 388.08 - APR 11 28 12.6 1.10 388.08 - APR 12 26 16.38 1.10 468.47 -		15		11.6	1.10				
MAR 17 24 3.48 1.10 91.87 3,468.17 ENERGY APR 3 7 0 1.10 - 600.00 TRANSMISSION APR 4 7 0 1.10 - 1,000.00 CAPACITY VALUE APR 5 9 0 1.10 - 5,068.17 APR 6 14 0 1.10 - - APR 7 20 0 1.10 - - APR 8 23 2.52 1.10 63.76 - APR 9 30 5.04 1.10 166.32 - APR 10 33 8.82 1.10 388.08 - APR 11 28 12.6 1.10 388.08 - APR 12 26 16.38 1.10 468.47 -	MAR	16	24	8.12		214.37			
APR 3 7 0 1.10 - 600.00 TRANSMISSION APR 4 7 0 1.10 - 1,000.00 CAPACITY VALUE APR 5 9 0 1.10 - 5,068.17 APR 6 14 0 1.10 - - APR 7 20 0 1.10 - - APR 8 23 2.52 1.10 63.76 - APR 9 30 5.04 1.10 166.32 - APR 10 33 8.82 1.10 320.17 - APR 11 28 12.6 1.10 388.08 - APR 12 26 16.38 1.10 468.47 -		17	24	3.48	1.10	91.87	3,468.17		
APR 4 7 0 1.10 - 1,000.00 CAPACITY VALUE APR 5 9 0 1.10 - 5,068.17 APR 6 14 0 1.10 - - APR 7 20 0 1.10 - - APR 8 23 2.52 1.10 63.76 - APR 9 30 5.04 1.10 166.32 - APR 10 33 8.82 1.10 320.17 - APR 11 28 12.6 1.10 388.08 - APR 12 26 16.38 1.10 468.47 -		3	7	0	1.10		600.00	<u> </u>	
APR 5 9 0 1.10 - 5,068.17 APR 6 14 0 1.10 - APR 7 20 0 1.10 - APR 8 23 2.52 1.10 63.76 APR 9 30 5.04 1.10 166.32 APR 10 33 8.82 1.10 320.17 APR 11 28 12.6 1.10 388.08 APR 12 26 16.38 1.10 468.47		4	7	0	1.10	-	1,000.00	CAPACITY VALUE	
APR 6 14 0 1.10 - APR 7 20 0 1.10 - APR 8 23 2.52 1.10 63.76 APR 9 30 5.04 1.10 166.32 APR 10 33 8.82 1.10 320.17 APR 11 28 12.6 1.10 388.08 APR 12 26 16.38 1.10 468.47		5	9	0	1.10	-	5,068.17		
APR 7 20 0 1.10 - APR 8 23 2.52 1.10 63.76 APR 9 30 5.04 1.10 166.32 APR 10 33 8.82 1.10 320.17 APR 11 28 12.6 1.10 388.08 APR 12 26 16.38 1.10 468.47			<u> </u>	0	1.10	-			
APR 8 23 2.52 1.10 63.76 APR 9 30 5.04 1.10 166.32 APR 10 33 8.82 1.10 320.17 APR 11 28 12.6 1.10 388.08 APR 12 26 16.38 1.10 468.47					1,10	-			
APR 9 30 5.04 1.10 166.32 APR 10 33 8.82 1.10 320.17 APR 11 28 12.6 1.10 388.08 APR 12 26 16.38 1.10 468.47					1.10	63.76			
APR 10 33 8.82 1.10 320.17 APR 11 28 12.6 1.10 388.08 APR 12 26 16.38 1.10 468.47					1.10	166.32			
APR 11 28 12.6 1.10 388.08 APR 12 26 16.38 1.10 468.47						320.17			
APR 12 26 16.38 1.10 468.47						388.08			
				_}					
	APR			17.64	1.10				

APR	14	26	17.64	1.10	504.50	T		
APR	15	26	16.38	1.10	468.47			
APR	16	27	12.6	1.10	374.22			
APR	17	27	8.82	1.10	261.95			
APR	18	27	5.04	1.10	149.69			
APR	19	30	2.52	1.10	83.16	3,753.29	ENERGY	
MAY	4	16	0	1.10	-	600.00	TRANSMISSION	
MAY	5	17	0	1.10	-	1,000.00	CAPACITY VALUE	
MAY	6	20	0	1.10	-	5,353.29		
MAY	7	22	0	1.10	-			
MAY	8	26	2.8	1.10	80.08			
MAY	9	31	5.6	1.10	190.96			•
MAY	10	33	9.8	1.10	355.74			
MAY	11	32	14	1.10	492.80			
MAY	12	34	18.2	1.10	680.68			
MAY	13	35	19.6	1.10	754.60			
MAY	14	36	19.6	1.10	776.16			
MAY	15	38	18.2	1.10	760.76			
MAY	16	40	14	1.10	616.00			
MAY	17	41	9.8	1.10	441.98			
MAY	18	41	5.6	1.10	252.56		ENERCY	
MAY	19	38	2.8	1.10	117.04	5,519.36	ENERGY TRANSMISSION	
MAY	20	34	0	1.10	-	600.00	CAPACITY VALUE	
				1.10		1,000.00	CAPACITY VALUE	
				1.10		7,119.36		
JUN	1	21	0	1.10	-			_
JUN	7	20	0	1.10	74.45			+
JUN	8	24	2.82	1.10	74.45 186.12			
JUN	9	30	5.64	1.10	358.28			
JUN	10	33 35	9.87 14.1	1.10	542.85			
JUN	12	39	18.33	1.10	786.36			
JUN	13	44	19.74	1.10	955.42			
JUN	14	47	19.74	1.10	1,020.56			
JUN	15	50	18.33	1.10	1,008.15			
JUN	16	52	14.1	1.10	806.52			
JUN	17	54	9.87	1.10	586.28			
JUN	18	52	5.64	1.10	322.61			
JUN	19		2,82	1.10	152.00	6,799.58	ENERGY	
JUN	20	43	0	1.10	-	600.00	TRANSMISSION	
JUN	21	36	0	1.10	-	1,000.00	CAPACITY VALUE	
JUN	22	32	0	1.10	-	8,399.58		
JUN	23	26	0	1.10	-			
JUL	7	21	0	1.10	-			
JUL	8	23	2.86	1.10	72.36			
JUL	9	30	5.72	1.10	188.76			
JUL	10	32	10.01	1.10	352.35			
JUL	11	37	14.3	1.10	582.01			
JUL	12	43	18.59	1.10	879.31			
JUL	13	46	20.02	1.10	1,013.01			
JUL	14	53	20.02	1.10	1,167.17			
JUL	15	54	18.59	1.10	1,104.25			
JUL	16	66	14.3	1.10	1,038.18			
JUL	17	68	10.01	1.10	748.75			
JUL	18		5.72	1.10	415.27	7 750 00	ENERCY	
JUL	19		2.86	1.10	191.91	7,753.32	ENERGY	
JUL	20	53	0	1.10	-	600.00	TRANSMISSION	

JUL	21	42	0	1.10	- 1	1,000.00	CAPACITY VALUE	
AUG	4	18	0	1.10	-	9,353.32		
AUG	5	19	0	1.10	-			
AUG	6	21	0	1.10	-			
AUG	7	2:3	0	1.10	-			·
AUG	8	24	2.78	1.10	73.39			
AUG	9	30	5.56	1.10	183.48			
AUG	10	33	9.73	1.10	353.20			
AUG	11	36	13.9	1.10	550.44			
AUG	12	45	18.07	1.10	894.47			
AUG	13	51	19.46	1.10	1,091.71			
AUG	14	64	19.46	1.10	1,369.98			
AUG	15	69	18.07	1.10	1,371.51	-		
AUG	16	7.7	13.9	1.10	1,177.33			
AUG	17	82	9.73	1.10	877.65			
AUG	18	72	5.56	1.10	440.35			
AUG	19	61	2.78	1.10	186.54	8,570.05	ENERGY	
AUG	20	50	0	1.10	-	600.00	TRANSMISSION	
SEP	3	13	0	1.10		1,000.00	CAPACITY VALUE	
SEP	4	13	0	1.10	-	10,170.05		
SEP	7	21	0	1.10	-			
SEP	8	21	2.52	1.10	58.21			
SEP	9	26	5.04	1.10	144.14			
SEP	10	3'1	8.82	1.10	300.76			
SEP	11	30	12.6	1.10	415.80			
SEP	12	32	16.38	1.10	576.58			
SEP	13	35	17.64	1.10	679.14			
SEP	14	41	17.64	1.10	795.56			
SEP	15	44	16.38	1.10	792.79			
SEP	16	48	12.6	1.10	665.28			
SEP	17	53	8.82	1.10	514.21			
SEP	18	50	5.04	1.10	277.20			
SEP	19	45	2.52	1.10	124.74	5,344.42	ENERGY	
SEP	20	36	0	1.10	-	600.00	TRANSMISSION	
						1,000.00	CAPACITY VALUE	
						6,944.42		
			1110		47,158.35			
	T		MWH					
						61,558.35		

AVERAGE VALUE OF SOLAR ENERGY \$61558.35 ÷ 1110 MWH = \$55.46/MWH = 5.5¢/KWH

Transmission charge of \$600/mo is a rough estimate. Using \$1000 per MW/month as a reasonable capacity value for solar energy.

HE - Hour ending

Hourly Cost - From MoPEP billing sheets

Solar MWH - Approximate production of a 1 MW DC solar energy system that hour

Losses Adjusted - Increases value of solar energy due to less transformer and line losses

Asset Rate - From MoPEP billing sheets

SUMMARY

This study and analysis show there's no financial or operational reason for AECI or MoPEP to squash the efforts of their members to enhance Missouri's Net-Metering and Easy Connection Act. In my opinion, it's a philosophical issue with the leadership or maybe they've just never been presented with the true analytics of net-metered solar energy. Either way, I hope this task force will create a path for local co-ops and cities to truly promote and use home grown solar energy if they so choose.

Prepared by:

Nicholas Barrack 104 E. 11th Street Rolla, MO 65401 573-341-5488 cserolla@gmail.com

Missouri Solar Energy Calculator

MoSolarCalculator.com

System Design

Wattage of each panel	100 .	watts	Average Monthy Usage (Kwh)		
Roof pitch or panel tilt	30	degrees*	January	210	
,			February	225	
Shading losses	0 9	%**	March	240	
			April	255	
# of panels facing South	10	qty	May	375	
			June	500	
# of panels facing West	0	qty	July	510	
			August	590	
# of panels facing East	0	qty	September	300	
			October	270	
# of panels facing North	0	qty	November	255	
			December	240	
Cost per Kwh (ex09)	\$0.09	\$/Kwh	Total	3970	
Wattage facing South Wattage facing West Mattage facing West			F	RESET	
Wattage facing East	0				
Wattage facing North	0			f l ali talia mang	
Total Wattage	1,400		To calculate years for payback take your final cost after tax credits and rebates and divide this by the estimated annual reduction in your electric bill.		
ANNUAL REDUCTION OF YOUR ELECTRIC BILL	\$126	***			

- * Tilt = 0° for horizontal surfaces; $15^\circ = 3/12$ pitch, $20^\circ = 4/12$ pitch, $25^\circ = 5/12$ pitch, $30^\circ = 6/12$ pitch or actual angle for ground-mounted systems, typically 30° .
- ** Shading losses = 0% for no trees/structures blocking sun from panels; can be as high as 50% depending on thickness and height of trees/structures
- *** If you overgenerate more than 3 or 4 months per year the credit on your electric bill will be less than what is shown in this calculation. To evaluate this you must enter monthly usage and study the graph to see the expected amount of overgeneration.

Appendix C: Additional Information Submitted to the Task Force

DNR-DOE Net Metering Study Procurement: How to Expedite the Procurement through OA Purchasing

1. Commit the Resources Needed for the Procurement

- a. Department Procurement Office engage your department internal procurement office early this will save time and avoid skipping steps. They will have to be involved in submitting your request in MissouriBUYS and all required documents to OA Purchasing.
- b. Department Contract Manager needs to be assigned to:
 - i. Work closely with your Department Procurement Office.
 - ii. Secure needed approvals (funding, leadership, etc.)
 - iii. Work with DOE leadership, Task Force to identify your agency's study needs and complete the Department Packet documents.
 - iv. Work with OA Purchasing to facilitate answers to questions from the buyer during RFP development, issuance to vendors, and during the evaluation.
 - v. Ensure the contractor fulfills their obligations under the contract
- c. Evaluators Identify Agency Subject Matter Experts (SME) who can serve as independent, unbiased evaluators that are not in supervisor/subordinate relationship. Evaluator responsibilities:
 - i. Must be available for evaluation meetings that will be scheduled and facilitated by OA Purchasing prior to RFP response deadline and for all evaluation meetings after closing. Having limited scheduling availability will delay the evaluation.
 - ii. Must take pre-requisite web-based evaluator training (45 minutes) and sign a confidentiality agreement since proposals and evaluation will be confidential records until award.
 - iii. Must complete the assigned homework to review the proposals for compliance with mandatory requirements and to assess preliminary evaluation findings from their review against the RFP evaluation criteria, ratings, and scoring. Meetings are rescheduled if committee hasn't done their homework (i.e. procurement is delayed).
 - iv. Must participate in evaluation roundtable discussions of vendor non-compliance findings and assessment of vendors' technical proposals against the RFP scoring criteria.

2. Pre-Procurement Planning: Identify Needs

- a. What BUSINESS PROBLEM are you trying to solve (this is important give thought to this; otherwise the RFP won't produce the outcome you are really seeking)
- b. WHAT DO YOU NEED THE CONTRACTOR TO DO?
 - i. What are the <u>major work components</u> and which ones are the highest priority?

- ii. What would a good solution look like?
- iii. Under each major work component, identify what specific work you need the contractor to do. Identify which tasks are mandatory (identified with "must" or "shall" terminology) and which things are desirable (identified with "should" or "highly desirable"; these are the nice to have's; would result in positive evaluation consideration but wouldn't eliminate the vendor if they don't agree to providing the "should's").
- iv. Are there any minimum qualifications for the vendor to have as a company in order to be considered a competent vendor for the project? Are there any minimum qualifications for the key personnel performing the work to have in order to be considered competent personnel to do the work?
- c. WHAT FACTORS ARE IMPORTANT TO EVALUATE to select the "lowest and best" vendor's proposal?
 - i. Relative to the major work components identified, what questions to you need the vendors to answer in their proposal that would help you compare what the vendor is offering to what a good solution looks like?
 - ii. Should each of the components of the Scope of Work factor into the evaluation as part of the vendor's proposed method of performance? If yes, are the components of equal importance or is one component more important than the other? Rank them in order of priority.

3. Prepare Department Packet (Procurement Manual, Appendix F)

- Failure to submit a complete department packet with the MissouriBUYS Request will DELAY the preparation of the RFP.
- b. Three documents comprise the Department Packet
 - i. Solicitation Checklist
 - ii. Scope of Work
 - iii. Quarter Million Dollar Request Worksheet (NOTE: this document requires both department legal and department director signature; the department packet document is considered incomplete until OA Purchasing has both signatures on the form)
- 4. Submit Department Packet and MissouriBUYS Request to OA Purchasing
- 5. Department Packet Review, Buyer Assignment, RFP Drafting
 - a. Section Manager reviews Department Packet for Completeness. (Rejected if not complete.)
 - b. Buyer is assigned.
 - c. Buyer will provide a Turnaround Time Worksheet and begin providing weekly updates on procurement progress.
 - d. Remember the buyer handles multiple procurements for multiple Executive Branch agencies.

- e. When buyer submits draft RFP to agency, agency needs to review and respond with edits in a timely manner. Slow review response time will delay RFP issuance.
- f. Buyer will make needed edits and obtain managerial approval to issue.

6. Communications Warnings

- a. Fairness during the procurement process is paramount. Failure to treat all vendors fairly can result in cancellation of the RFP and starting over. Even during the earliest planning stages, no vendor should be given information that would put them at a competitive advantage over vendors who were not given the same information.
- b. Department communications with all vendors regarding the procurement must cease when they submit the MissouriBUYS Request and Department Packet to OA Purchasing. Division of Purchasing must remain the sole point of contact for all matters regarding the procurement until the process is complete.
- c. Media inquiries, legislative inquiries, vendor inquiries regarding the procurement must be referred to OA Purchasing from the time the procurement request is submitted until the award is made and the protest period ends.

7. RFP Issued to Vendor Community for Online Response in MissouriBUYS

- a. If a pre-proposal conference is scheduled, knowledgeable agency representatives will need to participate under the OA Purchasing buyer's direction.
- **b.** Vendors will likely submit questions regarding the Scope of Work or evaluation components that will necessitate the OA Purchasing buyer needing information from the agency. Provide responses in a timely manner in order to avoid unnecessary extensions of the RFP response deadline.

8. Pre-Evaluation Meeting

- a. Purpose: Explain the evaluation process and evaluation homework, obtain confidentiality agreements that haven't already been submitted, schedule evaluation meetings, provide access to SharePoint site where proposals will be uploaded after the RFP deadline is reached.
- **b.** A compressed evaluation schedule is best for moving the evaluation forward at the fastest pace possible and avoids evaluators having to continuously refresh on what they had previously prepared.

9. RFP Closing

10. Evaluation of Proposals

- a. Buyer will upload the responses
- b. Evaluators conduct evaluation homework and come prepared to all evaluation meetings.
- c. Roundtable discussion to determine vendors' compliance with mandatory ("must" and "shall") requirements.

- i. A Best and Final Offer may (this is not automatic and is determined by the state) be requested to address vendor non-compliance issues or to make minor RFP revisions needed for clarity.
- ii. After receipt of Best and Final Offers, additional roundtable discussion is held to finalize determination of compliance.
- iii. Non-compliant vendors are ineligible for contract award.
- d. Roundtable discussion of vendors' technical proposal components against evaluation rubric (rating definitions and associated scoring for each evaluation element)
- e. Reference calls if needed
- f. Demonstrations or Question Answer Conference if needed.
- g. The evaluation committee scores the proposals and prepares brief comments to explain their scoring for each evaluation element. After review and approval by OA Purchasing, the evaluators sign their point form. (Note: Generally a consensus [single] evaluation report is able to be used; however, evaluators have the option of completing individual evaluation narratives and scoring.)
- h. Buyer completes evaluation of cost, terms and conditions issues, MBE/WBE Participation, Bonus Point Preferences for Missouri Service Disabled Veteran Enterprise Participation, Organization for the Blind or Sheltered Workshop Participation, EVerify, Anti-Discrimination against Israel Verification, Tax Compliance, Secretary of State Registration.
- i. The results of the Cost Evaluation, Technical Proposal, MBE/WBE Participation and Bonus Point Preferences for compliant vendors are combined to determine the "lowest and best" proposal.
- j. The buyer submits the final results to the agency leadership for approval to award.
- **k.** Buyer must complete all document redactions needed to comply with section 105.1500 RSMo, Personal Privacy Protection Act.

11. Award and Protest Period

- a. The award is made, vendors are notified of the results, and the section 105.1500 RSMo version of the documents are posted on the Awarded Bid and Contract Document Search page. (Note: The award itself does not authorize the vendor to proceed with contract work. See paragraph 11d.)
- b. Vendors have a ten state business day period to submit a protest in accordance with 1 CSR 40-1.050 (12).
- c. Purchasing conducts findings of fact, analysis to determine whether the protest should be sustained or denied. (Note: Although not required, the agency may provide input regarding the vendor's protest for Purchasing's consideration.)
- d. If no valid protest, the agency can proceed with issuing a purchase order to the vendor to authorize them to proceed with the contract work.



STATE OF MISSOURI OFFICE OF ADMINISTRATION DIVISION OF PURCHASING (PURCHASING) REQUEST FOR PROPOSAL (RFP)

ADDENDUM NO.: 01

SOLICITATION/OPPORTUNITY (OPP) NO.: RFPS300349012200700

TITLE: Broadband Infrastructure Analysis Services

ISSUE DATE: 10/26/21

REQ NO.: RN022200014 BUYER: Stacia Dawson PHONE NO.: (573) 522-3052

E-MAIL: Stacia.Dawson@oa.mo.gov

RETURN PROPOSAL NO LATER THAN: 11/1/2021 AT 2:00 PM CENTRAL TIME (END DATE)

RFP RESPONSE MUST BE SUBMITTED ELECTRONICALLY THROUGH MISSOURIBUYS. MAILED, COURIER, OR HAND-DELIVERED RFP RESPONSE WILL NOT BE ACCEPTED.

VENDORS MUST RESPOND ELECTRONICALLY THROUGH HTTPS://MISSOURIBUYS.MO.GOV

CONTRACT PERIOD: Effective Date of Contract through March 30, 2022 DELIVER SUPPLIES/SERVICES FOB (Free On Board) DESTINATION TO THE FOLLOWING ADDRESS:

State of Missouri Department of Economic Development

The vendor hereby declares understanding, agreement and certification of compliance to provide the items and/or services, at the prices quoted, in accordance with all terms and conditions, requirements, and specifications of the original RFP as modified by this and any previously issued RFP addendums. The vendor should, as a matter of clarity and assurance, also sign and return all previously issued RFP addendum(s) and the original RFP document. The vendor agrees that the language of the original RFP as modified by this and any previously issued RFP addendums shall govern in the event of a conflict with his/her proposal. The vendor further agrees that upon receipt of an authorized purchase order from the Division of Purchasing or when a Notice of Award is signed and issued by an authorized official of the State of Missouri, a binding contract shall exist between the vendor and the State of Missouri. The vendor shall understand and agree that in order for their proposal to be considered for evaluation, they must be registered in MissouriBUYS. If not registered at time of proposal opening, the vendor must register in MissouriBUYS upon request by the state immediately after proposal opening.

SIGNATURE REQUIRED

VENDOR NAME	MissouriBUYS SYSTEM ID (SEE VENDOR PROFILE - MAIN INFORMATION SCREEN)
MAILING ADDRESS	
CITY, STATE, ZIP CODE	
CONTACT PERSON	EMAIL ADDRESS
PHONE NUMBER	FAX NUMBER
VENDOR TAX FILING TYPE WITH IRS (CHECK ONE)	
Corporation Individual State/Local Government	PartnershipSole ProprietorIRS Tax-Exempt
AUTHORIZED SIGNATURE	DATE
PRINTED NAME	TITLE

ADDENDUM #01 to RFPS30034902200700

TITLE: Broadband Infrastructure Analysis Services

CONTRACT PERIOD: Effective Date of Contract through March 30, 2022

PLEASE BE ADVISED OF THE FOLLOWING CHANGES AND CLARIFICATIONS:

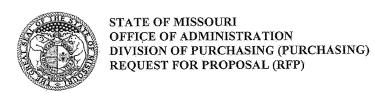
1. The following paragraphs are hereby revised by the addendum:

1.4.2

2.4.7

4.4.1. c

2. The attendance sheet from the preproposal teleconference has been added to MissouriBUYS and can be found under the Addendum Documents.



SOLICITATION/OPPORTUNITY (OPP) NO.: RFPS30034902200700

FITLE: Broadband Infrastructure Analysis Services

ISSUE DATE: 10/20/21

REQ NO.: RN022200014 BUYER: Stacia Dawson PHONE NO.: (573) 522-3052

E-MAIL: Stacia.Dawson@oa.mo.gov

RETURN PROPOSAL NO LATER THAN: 11/1/21 AT 2:00 PM CENTRAL TIME (END DATE)

RFP RESPONSE MUST BE SUBMITTED ELECTRONICALLY THROUGH MISSOURIBUYS. MAILED, COURIER, OR HAND DELIVERED RFP RESPONSE WILL NOT BE ACCEPTED.

VENDORS MUST RESPOND ELECTRONICALLY THROUGH HTTPS://MISSOURIBUYS.MO.GOV

CONTRACT PERIOD: Effective Date of Contract through March 30, 2022

DELIVER SUPPLIES/SERVICES FOB (Free On Board) DESTINATION TO THE FOLLOWING ADDRESS:

State of Missouri Department of Economic Development

The vendor hereby declares understanding, agreement and certification of compliance to provide the items and/or services, at the prices quoted, in accordance with all requirements and specifications contained herein and the Terms and Conditions Request for Proposal (Revised 06/27/19). The vendor further agrees that the language of this RFP shall govern in the event of a conflict with his/her proposal. The vendor further agrees that upon receipt of an authorized purchase order from the Division of Purchasing or when a Notice of Award is signed and issued by an authorized official of the State of Missouri, a binding contract shall exist between the vendor and the State of Missouri. The vendor shall understand and agree that in order for their proposal to be considered for evaluation, they must be registered in MissouriBUYS. If not registered at time of proposal opening, the vendor must register in MissouriBUYS upon request by the state immediately after proposal opening.

SIGNATURE REQUIRED

	The second management of the second management
VENDOR NAME	MissouriBUYS SYSTEM ID (SEE VENDOR PROFILE - MAIN INFORMATION SCREEN)
MAILING ADDRESS	
CITY, STATE, ZIP CODE	
CONTACT PERSON	EMAIL ADDRESS
NAVA NA TALAMAN	FAX NUMBER
PHONE NUMBER	THE HOUSE
VENDOR TAX FILING TYPE WITH IRS (CHECK ONE)	
	Making Main 1 Mary 1
Corporation Individual State/Local Government	PartnershipSole ProprietorIRS Tax-Exempt
AUTHORIZED SIGNATURE	DATE
	'
PRINTED NAME	TITLE

Solicitation Organization:

This document is divided into the following parts:

Introduction and General Information Section 1:

Scope of Work Section 2:

Contractual Requirements Section 3:

Proposal Submission Information and Requirements Section 4:

Pricing Page Exhibit A:

Technical Proposal - Proposed Methodology, Approach and Work Plan Exhibit B:

Technical Proposal – Team Qualifications - Leadership Team Exhibit C: Technical Proposal - Team Qualifications - Working Team Exhibit D:

Technical Proposal - Past Performance Exhibit E:

Participation Commitment Exhibit F:

Documentation of Intent to Participate Exhibit G:

Business Entity Certification, Enrollment Documentation, and Affidavit of Work Authorization Exhibit H:

and Documentation (E-Verify)

Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion Lower Tier Covered Exhibit I:

Transaction (Federal Debarment)

Anti Discrimination Against Israel Act Certification Exhibit J:

Miscellaneous Information Exhibit K:

Attachment 1 Evaluation Criteria for Technical Proposal

Terms and Conditions

1. INTRODUCTION AND GENERAL INFORMATION

This section of the solicitation includes a brief introduction and background information about the intended acquisition for which the requirements herein are written.

1.1 Introduction:

- 1.1.1 This document constitutes a request for competitive, sealed proposals for the provision of a broadband infrastructure gap analysis and cost modeling as set forth herein.
- 1.1.2 The purpose of this RFP is to conduct a broadband infrastructure gap analysis and a cost model that estimates the costs to close Missouri's wireline and wireless broadband infrastructure gaps.

1.2 RFP Questions:

- 1.2.1 Questions and issues relating to the RFP must be directed to the buyer. It is preferred that questions be emailed to the buyer at stacia.dawson@oa.mo.gov.
- 1.2.2 It is the vendor's responsibility to ask questions, request changes or clarifications, or otherwise advise the Division of Purchasing if the vendor believes that any language, specifications, or requirements are: (1) ambiguous, (2) contradictory or arbitrary, (3) violate any state or federal law or regulation, (4) restrict or limit the requirements to a single source, or (5) restrict or limit the vendor's ability to submit a proposal.
 - a. Vendors and their agents (including subcontractors, employees, consultants, or anyone else acting on their behalf) must direct all of their questions or comments regarding the RFP, the evaluation, etc., to the buyer of record indicated on the first page of this RFP. Vendors and their agents may not contact any other state employee regarding any of these matters during the solicitation and evaluation process. Inappropriate contacts are grounds for suspension and/or exclusion from specific procurements. Vendors and their agents who have questions regarding this matter should contact the buyer of record.
 - 1) The vendor may contact the Office of Equal Opportunity (OEO) regarding Minority Business Enterprise/Women Business Enterprise (MBE/WBE) certification or subcontracting.
- 1.2.3 All questions and issues should be submitted no later than ten calendar days prior to the due date of the proposals. If not received prior to ten days before the proposal due date, the Division of Purchasing may not be able to fully research and consider the respective questions or issues.
- 1.2.4 Upon the Division of Purchasing's consideration of questions and issues, if the Division of Purchasing determines that changes are necessary, the resulting changes will be included in a subsequently issued RFP addendum(s); absence of such response indicates that the questions and issues were considered but deemed unnecessary for a RFP addendum. All vendors will be advised of any change to the RFP's language, specifications, or requirements by a formal addendum to the RFP. There will be no posted written records of the questions/communications (i.e., formal question/answer document).

NOTE: The only official position of the State of Missouri shall be that which is contained in the RFP and any addendums thereto.

1.3 Pre-Proposal Teleconference:

1.3.1 A pre-proposal teleconference call regarding this Request for Proposal will be held on **Tuesday**, **October 26**, **2022**, **at 10:00 a.m.**, Central Time. Vendors are encouraged to participate in the pre-proposal teleconference as it will be used as the forum for questions, communications, and discussions regarding the RFP. The vendor should become familiar with the RFP and develop all questions prior to the teleconference in order to ask questions and otherwise participate in the public communications regarding the RFP.

Page 4

- a. Prior Communication Prior to the teleconference, the vendor may submit written communications and/or questions regarding the RFP to the buyer identified on page one. Such prior communication will provide the State of Missouri with insight into areas of the RFP which may be brought up for discussion during the teleconference and which may require clarification.
- b. During the teleconference, it shall be the sole responsibility of the vendor to orally address all issues previously presented to the buyer by the vendor, including any questions regarding the RFP or areas of the RFP requiring clarification.
- c. Addendum to the RFP Any changes needed to the RFP as a result of discussions from the teleconference will be accomplished as an addendum to the RFP. Neither formal minutes of the teleconference nor written records of the questions/communications will be maintained.
- 1.3.2 The vendor must contact the buyer from the Division of Purchasing as specified below to obtain dial-in instructions. The vendor will be provided with a telephone number to dial, in order to listen and participate in the pre-proposal conference call. The vendor shall refrain from contacting the state agency.
 - a. Contact the buyer by phone at (573) 522-3052 or by e-mail at Stacia.Dawson@oa.mo.gov.
- 1.3.3 The vendor should have a copy of the RFP for the teleconference since the RFP will be used as the agenda for the pre-proposal teleconference.

1.4 Background and Historical Usage Information:

1.4.1 The State of Missouri will be leveraging up to \$400 million of Federal American Rescue Plan Act (ARPA) funds to build out Missouri's broadband infrastructure in unserved and underserved areas of the state, pending approval of the Missouri General Assembly. The broadband infrastructure gap analysis and cost modeling will help the State ensure that ARPA funds are prioritized according to need and effectiveness.

Paragraph Revised via Addendum #01

1.4.2 The State of Missouri reserves the right to share the deliverables provided herein with the public, specifically with potential vendors on any subsequent work resulting from the Broadband Infrastructure Analysis Services. The awarded contractor(s) for this RFP shall be precluded from participating as a primary contractor or subcontractor for any subsequent State broadband deployment (construct, own and maintain) infrastructure project (whether awarded by grant, RFP, or otherwise) using the same funding stream (\$400 million ARPA funds) that results from the analysis work in this RFP.

END OF PART ONE: INTRODUCTION AND GENERAL INFORMATION

2. SCOPE OF WORK:

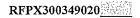
This section of the RFP includes the scope of work and provisions that shall govern the contract after RFP award. The contents of this section includes mandatory provisions that must be adhered to by the state and the contractor unless changed by a contract amendment.

2.1 General Requirements:

- 2.1.1 The contractor shall conduct one or both deliverables below related to the broadband infrastructure services required herein for the Department of Economic Development (hereinafter referred to as the state agency) in accordance with the provisions and requirements stated herein.
 - a. <u>Final Deliverable #1</u> –If the contractor proposed and was awarded to provide Final Deliverable #1, the contractor shall conduct a broadband infrastructure gap analysis and build a cost model.
 - b. <u>Final Deliverable #2</u> If the contractor proposed and was awarded to provide Final Deliverable #2, the contractor shall conduct a tower infrastructure analysis.
- 2.1.2 For each Final Deliverable, the contractor shall conduct data collection and analysis work using best available broadband availability data, which may include public (federal, state, or local) and proprietary data sets. The State of Missouri will make available, to the maximum extent possible, state funded broadband projects, data layers that may assist the contractor's analysis, and deliver recent reports such as the NG911 analysis to the contractor. The contractor's use of proprietary data sets should be focused on data sets that the contractor currently has access to (or can rapidly obtain). The contractor should also document and analyze current efforts to expand broadband in the private and public sectors, including those providers and/or areas currently leveraging state and federal broadband programs.
- 2.1.3 The contractor shall perform all services to the sole satisfaction of the state agency.

2.2 Contractor Experience Requirements:

- 2.2.1 If proposed and awarded to provide <u>Final Deliverable #1</u>, the contractor should have five (5) years of experience in the following areas:
 - a. Experience with broadband, with special familiarity and utilization of the Connect broadband and wireless cost modeling, with special familiarity and utilization of the Connect America Cost Model (CACM).
 - b. Experience in analyzing complex datasets provided by public agencies and proprietary collections. Additionally, the contractor must demonstrate a strong grasp of the multitude on data layers required to complete these analyses from both the public and private sector.
 - Experience with broadband deployment and upgrade.
 - d. Experience with telecommunications engineering principles in installing superior installations for Fiber to the Home (FTTH) and fixed wireless.
 - e. Experience delivering easy to understand analyses for non-technical audiences.
- 2.2.2 If proposed and awarded to provide <u>Final Deliverable #2</u>, the contractor should have five (5) years of experience in the following areas:
 - a. Experience in analyzing complex datasets provided by public agencies and proprietary collections. Additionally, the contractor must demonstrate a strong grasp of the multitude on data layers required to complete these analyses from both the public and private sector.
 - b. Experience with cellular network design, deployment and upgrade.
 - c. Experience with telecommunications engineering principles in installing superior installations for cellular networks.
 - d. Experience delivering easy to understand analyses for non-technical audiences.



2.3 Contractor Personnel Requirements:

- 2.3.1 If proposed and awarded to provide <u>Final Deliverable #1</u>, the contractor's personnel should have five (5) years of experience analyzing and evaluating broadband deployment and upgrade.
- 2.3.2 If proposed and awarded to provide <u>Final Deliverable #2</u>, the contractor's personnel should have five (5) years of experience with analyzing and evaluating cellular network design, deployment and upgrade.
- 2.3.3 <u>Leadership Team</u>: The contractor's leadership team members must have at least five (5) years of experience managing projects of similar size and scope to those required herein. Additionally, the leadership team members must have experience with managing conflict resolution. The contractor's leadership team must minimally consist of the following team members.
 - a. Project Manager-must oversee the project for the contractor
 - b. Executive Leadership team member must support the project manager
- 2.3.4 Working Team: The contractor's working team must minimally consist of the following team members.
 - a. GIS Specialist The contractor's GIS specialist must have 3 years of experience with visual datasets and models in ArcGIS platforms.
 - b. Data Analyst The contractor's data analyst should have five (5) years or experience in working with analyzing complex datasets provided by public agencies and proprietary collections.
 - c. Telecommunications Infrastructure Design Specialist The contractor's telecommunications infrastructure design specialist should be a professional engineer (PE) or possess certifications for deployment projects.
 - d. Communications coordinator The contractor's Communications coordinator should have 3 years of experience with creating and compiling client reports and developing content that is easy to understand for non-technical audiences.

2.4 Final Deliverable #1:

- 2.4.1 If the contractor proposed and was awarded to provide Final Deliverable #1, the contractor shall conduct a broadband infrastructure gap analysis and build a cost model utilizing telecommunications engineering best practices that estimates the costs to close Missouri's wireline and wireless broadband infrastructure gaps. The contractor shall understand and agree that wireline infrastructure shall include fiber, cable, DSL, middle-mile, and backhaul networks and wireless infrastructure shall include fixed wireless and cellular network.
- 2.4.2 When conducting the broadband infrastructure gap analysis and cost model, the contractor shall focus on assessing the wireline and fixed wireless networks infrastructure gaps in underserved and unserved areas of Missouri. For the purposes of the wireline and fixed wireless network analyses and conforming with the guidance issued for the American Rescue Plan State and Local Fiscal Recovery Fund and the State of Missouri, the following definitions shall apply:
 - a. Underserved area shall be defined as an area that is not currently served by a wireline connection that reliably delivers broadband service with at least 25 Megabits per second (Mbps) download speed and three Megabits per second of upload speed.
 - b. Unserved area shall be defined as an area that is currently without access to wireline or fixed wireless broadband internet service of speeds of at least ten Megabits per second download and one Megabit per second upload.
- 2.4.3 The contractor shall understand and agree that the broadband infrastructure gap analysis and cost model assessed areas must not include areas that have a broadband provider that has been selected to receive, or is otherwise receiving, federal or state funding subject to enforceable build-out commitments (e.g. signed agreements or formal agency approvals to proceed with construction). The areas with build-out

commitments must meet a minimum service of 100 Megabits per second download and 20 megabits upload with latency of 95 percent or more of all peak period measurements of network round trip latency [i.e., the total round trip latency between the customer premises and the closest designated Internet core peering interconnection point] are at or below 100 milliseconds.

- The contractor shall deliver both the broadband infrastructure gap analysis and cost modeling report, to the 2.4.4 state agency, plus supporting data focused on two methods of deployment.
 - Fiber-to-the-Home (FTTH) method must identify the capability of delivering a minimum of 100 megabits per second download and 100 Megabits per second upload, scalability to higher levels of services (e.g. Gigabyte symmetrical service), latency levels which exceed those defined herein, and the maximum throughput for consumers at peak period intervals; and
 - fixed wireless infrastructure build-out methods. b.
- Within the report, the contractor shall include estimates of the following listed data fields, which are defined 2.4.5 by the state agency below to provide clarity for the contractor. The data fields shall be segmented by upload/download speed (in Mbps) that are currently less than (a) 25/3 and (b) 100/10, and shall be further segmented to the county level. The contractor shall provide an addendum outlining by county for each of the following data fields:
 - Number of Structures: identifiable buildings on any given parcel; a.
 - Number of Passings: structures anticipated to receive a broadband connection for the end customer's b. home or business to the local network provider;
 - Cost (\$) per Passing: average cost calculated by the Total Investment Needed divided by the total c. Number of Passings;
 - Cost (\$) in Passed Access Investment: total investment cost to provide available service to the end d. customer:
 - Cost (\$) in Service Turn-up Based Investment: total investment cost to provide the physical e. connection to the home or business;
 - Cost (\$) in Middle Mile Investment: total investment needed to close the gaps in the broadband f. infrastructure to make connections between local area networks and the backbone Internet network; and
 - Cost (\$) in Total Investment Needed: total investment needed to close the gaps in the broadband g, infrastructure to make connections between local area networks and the backbone Internet network.
- The contractor must also analyze the following: 2.4.6
 - Assess potential environmental challenges and/or vulnerability of the current and potential broadband network in order to determine key goals for the sustainability and resiliency of the network: and
- Identify existing backbone and right-of-way infrastructure that can be leveraged to expand services (e.g., state or municipal rights-of-way, utility poles, existing public or private conduit or fiber). Paragraph Revised via Addendum #01

The contractor's methodologies for the Final Deliverable #1 must include Federal Communications Commission (FCC) Connect America Cost Model (CACM) v4.2 published by the Federal Communications Commission as one of the methodologies utilized and the contractor may include other methodologies. The contractor's report must include a detailed appendix of cost modeling methodologies and assumptions used along with rationale for doing so. The contractor shall articulate in the Final Deliverable #1 an assessment of risks for inaccuracies in the report and data.

2.5 Final Deliverable #2:

If the contractor proposed and was awarded to provide Final Deliverable #2, the contractor shall conduct a 2.5.1 tower infrastructure analysis utilizing telecommunications engineering best practices that identifies areas where cellular towers could be beneficial as well as existing towers that are not fiber fed.

- 2.5.2 Leveraging the contractor's telecommunications and engineering experts, the contractor shall focus on analyzing Missouri's network for cellular towers and recommending strategic areas to construct, refurbish, and retrofit cell towers on public lands (e.g., local, county, state, and federal) in rural, suburban, and urban settings. The contractor shall provide a map within the report of proposed cell tower locations and geographic coordinates. The contractor shall include construction estimates on the Cost (\$) per Tower or well-documented average cost to construct towers at different heights in the Midwest. The contractor shall articulate assumptions for fiber and backhaul needs and bases for calculations within cost estimates.
- 2.5.3 All of the contractor's proposed cellular tower locations must be in locations that are within wireless reach (<5 miles) of census tracts with <100 Mpbs download speed, including unserved areas.

2.6 Final Deliverable Reporting Requirements:

For each Final Deliverable (#1 and #2), the contractor shall submit the following three (3) Milestones. The contractor should submit Milestone #1 by December 15, 2021 and Milestone #2 by February 17, 2022. The contract must have all Milestones completed and submitted by no later than February 24, 2022.

- a. Milestone #1 completion of research, demonstrated by submission of an executive summary describing major tasks completed, data sources consulted or collected and analyzed, and an itemized list of tasks performed;
- b. Milestone #2 submission of a draft report for the state agency review and approval; and
- c. Milestone #3 submission of the final report.
- 2.6.2 The contractor shall provide the report(s) and documentation/report electronically submitted to the state agency via email in both PDF and Microsoft Word file types for the respective Final Deliverable and for each Milestone. The state agency will provide delivery instructions to contractor prior to submission of Milestone #1.
- 2.6.3 The contractor shall provide data within the report in a list or table format (e.g. census blocks, addresses, latitude/longitudes, etc.) in a Microsoft Excel file format that includes all supporting details outlined in the respective Final Deliverable.
- 2.6.4 The contractor must provide ArcGIS Shapefiles for supplemental maps and materials for the respective Final Deliverable.

2.7 Invoicing and Payment Requirements:

- 2.7.1 The State of Missouri shall submit contract payments to the contractor at the remittance address listed in the contractor's MissouriBUYS vendor registration. However, the contractor shall understand and agree the state reserves the right to make contract payments to the contractor through electronic funds transfer (EFT). Therefore, prior to any payments becoming due under the contract, the contractor must verify and update, if applicable, their vendor registration with their current remittance address and ACH-EFT payment information at https://MissouriBUYS.mo.gov.
- 2.7.2 Each contractor invoice must be on the contractor's original descriptive business invoice form unless the contractor is submitting an integrated electronic invoice (elnvoice) in MissouriBUYS. Each invoice must contain a unique invoice number and the remittance address included in the contractor's MissouriBUYS vendor registration. The invoice number will be listed on the state's EFT addendum record to enable the contractor to properly apply state payments to invoices. The contractor must comply with all other invoicing requirements stated in the RFP.
- 2.7.3 The contractor may obtain detailed information for payments issued for the past 24 months from the State of Missouri's central accounting system (SAM II) on the Vendor Services Portal at https://www.vendorservices.mo.gov/vendorservices/Portal/Default.aspx.

2.7.4 Invoicing – After completion of each Milestone, the contractor shall submit an invoice to the state agency. With each invoice the contractor shall provide the state agency with the respective document/report as required in the Milestone and Reporting Requirements Section herein for the respective Milestone completed. The contractor's invoice shall not exceed the identified payment percentage in the table below for the respective Milestone.

	Payment Percentage for Each Milestone within Final Deliverables		
Milestone completed and accepted	Milestone #1	Milestone #2	Milestone #3
% of firm fixed price stated on the Pricing Page of the contractor's awarded proposal	60%	20%	20%

- 2.7.5 Payments After the state agency approves the document/report for the specific Milestone, the contractor shall be paid in accordance with the payment percentage identified in the table above for the respective Milestone.
- 2.7.6 Other than the payments specified above, no other payments or reimbursements shall be made to the contractor for any reason whatsoever including, but not limited to taxes, travel expenses, shipping charges, insurance, interest, penalties, termination payments, attorney fees, liquidated damages, etc.
- 2.7.7 Notwithstanding any other payment provision of the contract, if the contractor fails to perform required work or services, fails to submit reports when due, or is indebted to the United States, the state agency may withhold payment or reject invoices under the contract.
- 2.7.8 Final invoices are due by no later than thirty (30) calendar days of the expiration of the contract. The state agency shall have no obligation to pay any invoice submitted after the due date.
- 2.7.9 If a request by the contractor for payment or reimbursement is denied, the state agency shall provide the contractor with written notice of the reason(s) for denial.
- 2.7.10 If the contractor is overpaid by the state agency, upon official notification by the state agency, the contractor shall provide the state agency (1) with a check payable as instructed by the state agency in the amount of such overpayment at the address specified by the state agency or (2) deduct the overpayment from the monthly invoices as requested by the state agency.

3. CONTRACTUAL REQUIREMENTS

This section of the RFP includes contractual requirements and provisions that will govern the contract after RFP award. The contents of this section include mandatory provisions that must be adhered to by the state and the contractor unless changed by a contract amendment. Response to this section by the vendor is not necessary as all provisions are mandatory.

3.1 Contract:

- 3.1.1 A binding contract shall consist of: (1) the RFP, addendums thereto, and any Best and Final Offer (BAFO) request(s) with RFP changes/additions, (2) the contractor's proposal including any contractor BAFO response(s), (3) clarification of the proposal, if any, and (4) the Division of Purchasing's acceptance of the proposal by "notice of award". All Exhibits and Attachments included in the RFP shall be incorporated into the contract by reference.
 - a. A notice of award issued by the State of Missouri does not constitute an authorization for shipment of equipment or supplies or a directive to proceed with services. Before providing equipment, supplies, and/or services for the State of Missouri, the contractor must receive a properly authorized purchase order or other form of authorization given to the contractor at the discretion of the state agency.
 - b. The contract expresses the complete agreement of the parties and performance shall be governed solely by the specifications and requirements contained therein.
 - The State of Missouri does not negotiate contracts after award.
 - c. Any change to the contract, whether by modification and/or supplementation, must be accomplished by a formal contract amendment signed and approved by and between the duly authorized representative of the contractor and the Division of Purchasing prior to the effective date of such modification. The contractor expressly and explicitly understands and agrees that no other method and/or no other document, including correspondence, acts, and oral communications by or from any person, shall be used or construed as an amendment or modification to the contract.

3.2 Contract Period:

3.2.1 The original contract period shall be as stated on the Notice of Award. The contract shall not bind, nor purport to bind, the state for any contractual commitment in excess of the original contract period.

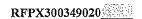
3.3 Termination:

3.3.1 The Division of Purchasing reserves the right to terminate the contract at any time, for the convenience of the State of Missouri, without penalty or recourse, by giving written notice to the contractor at least thirty (30) calendar days prior to the effective date of such termination. In the event of termination pursuant to this paragraph, all documents, data, reports, supplies, equipment, and accomplishments prepared, furnished or completed by the contractor pursuant to the terms of the contract shall, at the option of the Division of Purchasing, become the property of the State of Missouri. The contractor shall be entitled to receive compensation for services and/or supplies delivered to and accepted by the State of Missouri pursuant to the contract prior to the effective date of termination.

3.4 Contractor Liability:

3.4.1 The contractor shall be responsible for any and all tort or statutory liability to third-parties (including, but not limited to, the contractor's agents, employees, and subcontractors) arising out of the contractor's provision of any equipment or services under the contract. In addition, the contractor agrees to defend and indemnify the State of Missouri, it agencies, employees, and assignees from and against all such liability.

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- a. The contractor also agrees to indemnify, defend, and hold harmless the State of Missouri, its agencies, employees, and assignees from and against any and all tort or statutory liability arising out of the provision of any equipment or services by any subcontractor or other person employed by or under the supervision of the contractor under the terms of the contract.
- b. The contractor shall not be responsible for any injury or damage occurring solely as a result of any negligent act or omission by the State of Missouri, its agencies, employees, or assignees.
- c. The contractor shall not be responsible for any of the following: (1) third party claims against the State of Missouri for losses or damages except as described above (2) consequential damages (including lost profits or savings), even if the contractor is informed of their possibility.
- 3.4.2 The contractor shall understand and agree that pursuant to the Constitution of the State of Missouri, Article III, Section 39 the state shall not indemnify, hold harmless, or agree in advance to defend any person or entity.

3.5 Insurance:

3.5.1 The contractor shall understand and agree that the State of Missouri cannot save and hold harmless and/or indemnify the contractor or employees against any liability incurred or arising as a result of any activity of the contractor or any activity of the contractor's employees related to the contractor's performance under the contract. Therefore, the contractor must acquire and maintain adequate liability insurance in the form(s) and amount(s) sufficient to protect the State of Missouri, its agencies, its employees, its clients, and the general public against any such loss, damage and/or expense related to his/her performance under the contract. General and other non-professional liability insurance shall include an endorsement that adds the State of Missouri as an additional insured. Self-insurance coverage or another alternative risk financing mechanism may be utilized provided that such coverage is verifiable and irrevocably reliable and the State of Missouri is protected as an additional insured. In the event any insurance coverage is canceled, the state agency must be notified at least thirty (30) calendar days prior to such cancelation.

3.6 Subcontractors:

- 3.6.1 Any subcontracts for the products/services described herein must include appropriate provisions and contractual obligations to ensure the successful fulfillment of all contractual obligations agreed to by the contractor and the State of Missouri and to ensure that the State of Missouri is indemnified, saved, and held harmless from and against any and all claims of damage, loss, and cost (including attorney fees) of any kind related to a subcontract in those matters described in the contract between the State of Missouri and the contractor.
 - a. The contractor shall expressly understand and agree that he/she shall assume and be solely responsible for all legal and financial responsibilities related to the execution of a subcontract.
 - b. The contractor shall agree and understand that utilization of a subcontractor to provide any of the products/services in the contract shall in no way relieve the contractor of the responsibility for providing the products/services as described and set forth herein.
 - c. The contractor must obtain the approval of the State of Missouri prior to establishing any new subcontracting arrangements and before changing any subcontractors. The approval shall not be arbitrarily withheld.
 - d. Pursuant to subsection 1 of section 285.530, RSMo, no contractor or subcontractor shall knowingly employ; hire for employment, or continue to employ an unauthorized alien to perform work within the state of Missouri. In accordance with sections 285.525 to 285.550, RSMo, a general contractor or subcontractor of any tier shall not be liable when such contractor or subcontractor contracts with its

direct subcontractor who violates subsection 1 of section 285,530, RSMo, if the contract binding the contractor and subcontractor affirmatively states that:

- 1) The direct subcontractor is not knowingly in violation of subsection 1 of section 285.530, RSMo, and shall not henceforth be in such violation.
- 2) The contractor or subcontractor receives a sworn affidavit under the penalty of perjury attesting to the fact that the direct subcontractor's employees are lawfully present in the United States.

3.7 Participation by Other Organizations:

- 3.7.1 The contractor must comply with any Organization for the Blind/Sheltered Workshop, Service-Disabled Veteran Business Enterprise (SDVE), and/or Minority Business Enterprise/Women Business Enterprise (MBE/WBE) participation levels committed to in the contractor's awarded proposal.
 - a. The contractor shall prepare and submit to the Division of Purchasing a report detailing all payments made by the contractor to Organizations for the Blind/Sheltered Workshops, SDVEs, and/or MBE/WBEs participating in the contract for the reporting period. The contractor must submit the report on a monthly basis, unless otherwise determined by the Division of Purchasing.
 - b. The Division of Purchasing will monitor the contractor's compliance in meeting the Organizations for the Blind/Sheltered Workshop and SDVE participation levels committed to in the contractor's awarded proposal. The Division of Purchasing in conjunction with the Office of Equal Opportunity (OEO) will monitor the contractor's compliance in meeting the MBE/WBE participation levels committed to in the contractor's awarded proposal. If the contractor's payments to the participating entities are less than the amount committed, the state may cancel the contract and/or suspend or debar the contractor from participating in future state procurements, or retain payments to the contractor in an amount equal to the value of the participation commitment less actual payments made by the contractor to the participating entity. If the Division of Purchasing determines that the contractor becomes compliant with the commitment, any funds retained as stated above, will be released.
 - c. If a participating entity fails to retain the required certification or is unable to satisfactorily perform, the contractor must obtain other certified MBE/WBEs or other organizations for the blind/sheltered workshops or other SDVEs to fulfill the participation requirements committed to in the contractor's awarded proposal.
 - 1) The contractor must obtain the written approval of the Division of Purchasing for any new entities. This approval shall not be arbitrarily withheld.
 - 2) If the contractor cannot obtain a replacement entity, the contractor must submit documentation to the Division of Purchasing detailing all efforts made to secure a replacement. The Division of Purchasing shall have sole discretion in determining if the actions taken by the contractor constitute a good faith effort to secure the required participation and whether the contract will be amended to change the contractor's participation commitment.
 - d. No later than 30 days after the contract's expiration date, the contractor must submit an affidavit to the Division of Purchasing. The affidavit must be signed by the director or manager of the participating Organizations for the Blind/Sheltered Workshop verifying provision of products and/or services and compliance of all contractor payments made to the Organizations for the Blind/Sheltered Workshops. The contractor may use the affidavit available on the Division of Purchasing's website at https://oa.mo.gov/purchasing/vendor-information or another affidavit providing the same information.

3.8 Substitution of Personnel:

3.8.1 The contractor agrees and understands that the State of Missouri's agreement to the contract is predicated in part on the utilization of the specific key individual(s) and/or personnel qualifications identified in the proposal. Therefore, the contractor agrees that no substitution of such specific key individual(s) and/or personnel qualifications shall be made without the prior written approval of the state agency. The contractor further agrees that any substitution made pursuant to this paragraph must be equal or better than originally proposed and that the state agency's approval of a substitution shall not be construed as an acceptance of the substitution's performance potential. The State of Missouri agrees that an approval of a substitution will not be unreasonably withheld.

3.9 Authorized Personnel:

- 3.9.1 The contractor shall only employ personnel authorized to work in the United States in accordance with applicable federal and state laws. This includes but is not limited to the Illegal Immigration Reform and Immigrant Responsibility Act (IIRIRA) and INA Section 274A.
- 3.9.2 If the contractor is found to be in violation of this requirement or the applicable state, federal, and local laws and regulations, and if the State of Missouri has reasonable cause to believe that the contractor has knowingly employed individuals who are not eligible to work in the United States, the state shall have the right to cancel the contract immediately without penalty or recourse and suspend or debar the contractor from doing business with the state. The state may also withhold up to twenty-five percent of the total amount due to the contractor.
- 3.9.3 The contractor shall agree to fully cooperate with any audit or investigation from federal, state, or local law enforcement agencies.
- 3.9.4 If the contractor meets the definition of a business entity as defined in section 285.525, RSMo, pertaining to section 285.530, RSMo, the contractor shall maintain enrollment and participation in the E-Verify federal work authorization program with respect to the employees hired after enrollment in the program who are proposed to work in connection with the contracted services included herein. If the contractor's business status changes during the life of the contract to become a business entity as defined in section 285.525, RSMo, pertaining to section 285.530, RSMo, then the contractor shall, prior to the performance of any services as a business entity under the contract:
 - a. Enroll and participate in the E-Verify federal work authorization program with respect to the employees hired after enrollment in the program who are proposed to work in connection with the services required herein; AND
 - b. Provide to the Division of Purchasing the documentation required in the exhibit titled <u>Business Entity Certification</u>, <u>Enrollment Documentation</u>, and <u>Affidavit of Work Authorization</u> affirming said company's/individual's enrollment and participation in the E-Verify federal work authorization program; AND
 - c. Submit to the Division of Purchasing a completed, notarized Affidavit of Work Authorization provided in the exhibit titled <u>Business Entity Certification</u>, <u>Enrollment Documentation</u>, and <u>Affidavit of Work Authorization</u>.
- 3.9.5 In accordance with subsection 2 of section 285.530, RSMo, the contractor should renew their Affidavit of Work Authorization annually. A valid Affidavit of Work Authorization is necessary to award any new contracts.

3.10 Anti-Discrimination Against Israel Act Contractor Requirements:

3.10.1 If the contractor meets the definition of a company as defined in section 34.600, RSMo, and has ten or more employees, the contractor shall not engage in a boycott of goods or services from the State of Israel; from companies doing business in or with Israel or authorized by, licensed by, or organized under the laws of the

State of Israel; or from persons or entities doing business in the State of Israel as defined in section 34.600, RSMo.

- 3.10.2 If the contractor meets the definition of a company as defined in section 34.600, RSMo, and the company's employees increases to ten or more during the life of the contract, then the contractor shall submit to the Division of Purchasing a completed Box C of the exhibit titled, <u>Anti-Discrimination Against Israel Act Certification</u>, and shall comply with the requirements of Box C.
- 3.10.3 If during the life of the contract, the contractor's business status changes to become a company as defined in section 34.600, RSMo, and the company has ten or more employees, then the contractor shall comply with, complete, and submit to the Division of Purchasing a completed Box C of the exhibit titled, Anti-Discrimination Against Israel Act Certification.

3.11 Contractor Status:

3.11.1 The contractor is an independent contractor and shall not represent the contractor or the contractor's employees to be employees of the State of Missouri or an agency of the State of Missouri. The contractor shall assume all legal and financial responsibility for salaries, taxes, FICA, employee fringe benefits, workers compensation, employee insurance, minimum wage requirements, overtime, etc., and agrees to indemnify, save, and hold the State of Missouri, its officers, agents, and employees, harmless from and against, any and all loss; cost (including attorney fees); and damage of any kind related to such matters.

3.12 Coordination:

3.12.1 The contractor shall fully coordinate all contract activities with those activities of the state agency. As the work of the contractor progresses, advice and information on matters covered by the contract shall be made available by the contractor to the state agency or the Division of Purchasing throughout the effective period of the contract.

3.13 Property of State:

- 3.13.1 The contractor shall agree and understand that all documents, data, reports, supplies, equipment, and accomplishments prepared, furnished, or completed by the contractor pursuant to the terms of the contract shall become the property of the State of Missouri. Upon expiration, termination, or cancellation of the contract, said items shall become the property of the State of Missouri, which shall include all rights and interests for present and future use or sale as deemed appropriate by the state agency.
 - a. The State of Missouri understands and agrees that any ancillary software tools or pre-printed materials (e.g., project management software tools or training software tools, etc.) developed or acquired by the contractor that may be necessary to perform a particular service required hereunder but not required as a specific deliverable of the contract, shall remain the property of the contractor; however, the contractor shall be responsible for ensuring such tools and materials are being used in accordance with applicable intellectual property rights and copyrights.

3.14 Confidentiality:

- 3.14.1 The contractor shall agree and understand that all discussions with the contractor and all information gained by the contractor as a result of the contractor's performance under the contract shall be confidential and that no reports, documentation, or material prepared as required by the contract shall be released to the public without the prior written consent of the state agency.
- 3.14.2 If required by the state agency, the contractor and any required contractor personnel must sign specific documents regarding confidentiality, security, or other similar documents upon request. Failure of the contractor and any required personnel to sign such documents shall be considered a breach of contract and subject to the cancellation provisions of this document.

- 3.15 Federal Funds Requirements The contractor shall understand and agree that the contract may involve the use of federal funds. Therefore, for any federal funds used, the following paragraphs shall apply:
- 3.15.1 Applicable Laws and Regulations In performing its responsibilities under the contract, the contractor shall fully comply with the following Office of Management and Budget (OMB) administrative requirements and cost principles, as applicable, including any subsequent amendments.
 - a. Uniform Administrative Requirements OMB Circular A-102 Grants and Cooperative Agreements with State and Local Governments; and 2 CFR 215 Grants and Other Agreements with Institutions of Higher Learning, Hospitals and Other Non-Profit Organizations (OMB Circular A-110).
 - b. Cost Principles:
 - 1) 2 CFR 225 State, Local and Indian Tribal Governments (OMB Circular A-87);
 - 2) 2 CFR 230 Non-Profit Organizations (OMB Circular A-122);
 - 3) 2 CFR 220 Educational Institutions (OMB Circular A-21);
 - 4) 48 CFR 31.2 For-Profit Organizations; and
 - 5) 45 CFR 74 Appendix E Hospitals.
- 3.15.2 Steven's Amendment In accordance with the Departments of Labor, Health and Human Services, and Education and Related Agencies Appropriations Act, Public Law 101-166, Section 511, "Steven's Amendment", the contractor shall not issue any statements, press releases, and other documents describing projects or programs funded in whole or in part with Federal funds unless the prior approval of the state agency is obtained and unless they clearly state the following as provided by the state agency:
 - a. The percentage of the total costs of the program or project which will be financed with Federal funds;
 - b. The dollar amount of Federal funds for the project or program; and
 - c. The percentage and dollar amount of the total costs of the project or program that will be financed by nongovernmental sources.
- 3.15.3 The contractor shall comply with 31 U.S.C. 1352 relating to limitations on use of appropriated funds to influence certain federal contracting and financial transactions. No funds under the contract shall be used to pay the salary or expenses of the contractor, or agent acting for the contractor, to engage in any activity designed to influence legislation or appropriations pending before the United States Congress or Missouri General Assembly. The contractor shall comply with all requirements of 31 U.S.C. 1352 which is incorporated herein as if fully set forth. The contractor shall submit to the state agency, when applicable, Disclosure of Lobbying Activities reporting forms.
- 3.15.4 The contractor shall comply with the requirements of the Single Audit Act Amendments of 1996 (P.L. 104-156) and OMB Circular A-133, including subsequent amendments or revisions, as applicable or 2 CFR 215.26 as it relates to for-profit hospitals and commercial organizations. A copy of any audit report shall be sent to the state agency each contract year if applicable. The contractor shall return to the state agency any funds disallowed in an audit of the contract.
- 3.15.5 The contractor shall comply with the Pro-Children Act of 1994 (20 U.S.C. 6081), which prohibits smoking within any portion of any indoor facility used for the provision of services for children as defined by the Act.
- 3.15.6 The contractor shall comply with 37 CFR part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations, as applicable.

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3.15.7 The contractor shall comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401 et seq.) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251 et seq.).

- 3.15.8 If the contractor is a sub-recipient as defined in OMB Circular A-133, Section 210, the contractor shall comply with all applicable implementing regulations, and all other laws, regulations and policies authorizing or governing the use of any federal funds paid to the contractor through the contract.
- 3.15.9 The contractor shall comply with the public policy requirements as specified in the Department of Health and Human Services (HHS) Grants Policy Statement:

(https://www.hhs.gov/sites/default/files/grants/grants/policies-regulations/hhsgps107.pdf)

- 3.15.10 The contractor shall comply with Trafficking Victims Protection Act of 2000 (22 U.S.C. 7104), as amended.
- 3.15.11 The contractor shall provide a drug free workplace in accordance with the Drug Free Workplace Act of 1988 and all applicable regulations. The contractor shall report any conviction of the contractor's personnel under a criminal drug statute for violations occurring on the contractor's premises or off the contractor's premises while conducting official business. A report of a conviction shall be made to the state agency within five (5) working days after the conviction.
- 3.15.12 Non-Discrimination and ADA The contractor shall comply with all federal and state statutes, regulations and executive orders relating to nondiscrimination and equal employment opportunity to the extent applicable to the contract. These include but are not limited to:
 - a. Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color, or national origin (this includes individuals with limited English proficiency) in programs and activities receiving federal financial assistance and Title VII of the Act which prohibits discrimination on the basis of race, color, national origin, sex, or religion in all employment activities;
 - b. Equal Pay Act of 1963 (P.L. 88 -38, as amended, 29 U.S.C. Section 206 (d));
 - c. Title IX of the Education Amendments of 1972, as amended (20 U.S.C 1681-1683 and 1685-1686) which prohibits discrimination on the basis of sex;
 - d. Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794) and the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) which prohibit discrimination on the basis of disabilities;
 - e. The Age Discrimination Act of 1975, as amended (42 U.S.C. 6101-6107) which prohibits discrimination on the basis of age;
 - f. Equal Employment Opportunity E.O. 11246, "Equal Employment Opportunity", as amended by E.O. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity";
 - g. Missouri State Regulation, 19 CSR 10-2.010, Civil Rights Requirements;
 - h. Missouri Governor's E.O. #94-03 (excluding article II due to its repeal);
 - i. Missouri Governor's E.O. #05-30; and
 - j. The requirements of any other nondiscrimination federal and state statutes, regulations and executive orders which may apply to the services provided via the contract.

END OF PART THREE: CONTRACTUAL REQUIREMENTS

4. PROPOSAL SUBMISSION INFORMATION AND REQUIREMENTS

This section of the RFP includes information and instructions to the vendor that are integral to vendors offering a proposal. The contents of this section are informational and instructional. Many of the instructional provisions require certain actions by the vendor in offering a proposal.

4.1 Introduction:

- 4.1.1 The vendor's proposal should include a complete plan for accomplishing the tasks described in this RFP and any supplemental tasks the vendor has identified as necessary to successfully complete the obligations outlined in this RFP. The vendor's plan should demonstrate an understanding of and the ability to meet and perform all contractual requirements listed in this request, including all contractual services.
- 4.1.2 This section describes the contents and format designed to ensure completeness in the vendor's proposal. The intent of the instructions contained herein is to standardize the proposals to enable equitable measurements for competitive review for awarding to the lowest and best responsive vendor with a proposal that is the most advantageous to the state.

4.2 Submission of Solicitation Response:

- MissouriBUYS is the State of Missouri's web-based statewide eProcurement system which is powered by 4.2.1 WebProcure, through our partner, Proactis (https://www.missouribuys.mo.gov). Vendors must submit their solicitation response as an electronic response. The electronic method of submission is explained briefly instructions provided step-by-step at the below and more detail in https://missouribuys.mo.gov/sites/missouribuys/files/how-to-respond-to-a-solicitation.pdf. (This document is also on the Bid Board referenced above.) Be sure to include the solicitation/opportunity (OPP) number, company name, and a contact name on any attachments.
 - a. In order to become a registered vendor, the vendor can register by going to the MissouriBUYS Home Page referenced above, clicking the "Register" button at the top of the page, and completing the Vendor Registration.
 - b. The vendor is solely responsible for ensuring timely submission of their solicitation response. Failure to allow adequate time prior to the solicitation end date to complete and submit a response to a solicitation, particularly in the event technical support assistance is required, places the vendor and their response at risk of not being accepted on time.
 - c. NOTE: The vendor understands and agrees that regardless of any other reference herein which implies acceptance of other than electronic proposals, until otherwise notified by a subsequent addenda, only electronic proposals through MissouriBUYS can be accepted at this time.
- 4.2.2 Electronic Response in MissouriBUYS Vendors must submit their entire response electronically through the MissouriBUYS System website. In addition to completing the on-line pricing, the registered vendor should submit completed exhibits, forms, and other information concerning the solicitation as an attachment to the electronic response. The registered vendor is instructed to review the solicitation submission provisions carefully to ensure they are providing all required pricing.
 - a. The exhibits, forms, and Pricing Page(s) provided herein can be saved, completed by a registered vendor, and then sent as an attachment to the electronic submission. Other information requested or required may be sent as an attachment. Additional instructions for submitting electronic attachments are on the MissouriBUYS System website.
 - To ensure software compatibility with the MissouriBUYS system, the vendor should complete
 attachments using Microsoft Word or Microsoft Excel, or if using a different application for
 completing attachments, the vendor should save the completed attachment as a searchable PDF

document in order to preserve the formatting. A vendor's failure to follow these instructions and instead use a different application or method for completion and submission of attachments could render some of the vendor's response in their attachments to be unreadable which could negatively impact the evaluation of the vendor's response.

- 4.2.3 Compliance with Requirements, Terms and Conditions: Vendors are cautioned that the State of Missouri shall not award a non-compliant proposal. Consequently, any vendor indicating non-compliance or providing a response in conflict with mandatory requirements, terms, conditions or provisions of the RFP shall be eliminated from further consideration for award unless the state exercises its sole option to competitively negotiate the respective proposal(s) and the vendor resolves the noncompliant issue(s).
 - a. The vendor is cautioned when submitting pre-printed terms and conditions or other type material to make sure such documents do not contain terms and conditions which conflict with those of the RFP and its contractual requirements.
 - b. In order to ensure compliance with the RFP, the vendor should indicate agreement that, in the event of conflict between any of the vendor's response and the RFP requirements, terms and conditions, the RFP shall govern. Taking exception to the state's terms and conditions may render an vendor's proposal unacceptable and remove it from consideration for award.

4.3 Confidential Materials:

- 4.3.1 Pursuant to section 610.021, RSMo, the vendor's proposal and related documents shall not be available for public review until a contract has been awarded or all proposals are rejected.
 - a. The Division of Purchasing is a governmental body under Missouri Sunshine Law (chapter 610, RSMo). Section 610.011, RSMo, requires that all provisions be "liberally construed and their exceptions strictly construed" to promote the public policy that records are open unless otherwise provided by law.
 - b. Regardless of any claim by a vendor as to material being confidential and not subject to copying or distribution, or how a vendor characterizes any information provided in its proposal, all material submitted by the vendor in conjunction with the RFP is subject to release after the award of a contract in relation to a request for public records under the Missouri Sunshine Law (see chapter 610, RSMo). Only information expressly permitted to be closed pursuant to the strictly construed provisions of Missouri's Sunshine Law will be treated as a closed record by the Division of Purchasing and withheld from any public request submitted to Division of Purchasing after award. The vendor should presume information provided to Division of Purchasing in a proposal will be public following the award of the contract or after rejection of all proposals and made available upon request in accordance with the provisions of state law. The vendor's sole remedy for the state's denial of any confidentiality request shall be limited to withdrawal of their proposal in its entirety. It is not the State of Missouri's intention to have requested any confidential material as part of the vendor's proposal. Therefore, vendors should NOT include confidential material with their proposal.
 - c. In no event will the following be considered confidential or exempt from the Missouri Sunshine Law:
 - 1) Vendor's entire proposal including client lists, references, proposed personnel, and methodology including schedule of events and/or deliverables;
 - 2) Vendor's pricing; and
 - 3) Vendor's product specifications unless specifications specifically disclose scientific and technological innovations in which the owner has a proprietary interest (see subsection 15 of section 610.021, RSMo).

d. On-line Proposal - If a registered vendor is responding electronically through the MissouriBUYS System website and attaches information with their proposal that is allowed by the Missouri Sunshine Law to be exempt from public disclosure, such specific material of their proposal must be attached as a separate document and must have the box "Confidential" selected when attaching the document. If the "Confidential" box is not selected when attaching the document, the document must be clearly marked as confidential along with an explanation of what qualifies the specific material to be held as confidential pursuant to the provisions of section 610.021, RSMo. The vendor's failure to follow these instructions shall relieve the state of any obligation to preserve the confidentiality of the documents.

- e. Imaging Ready Except for any portion of a proposal qualifying as confidential as determined by the Division of Purchasing as specified above, after a contract is executed or all proposals are rejected, all proposals are uploaded into the Division of Purchasing imaging system.
 - The information will be available for viewing through the Internet from the Division of Purchasing Awarded Bid and Contract Document Search system. Therefore, the vendor is advised not to include any information in the proposal that the vendor does not want to be viewed by the public, including personal identifying information such as social security numbers.
 - Also, in preparing a proposal, the vendor should be mindful of document preparation efforts for imaging purposes and storage capacity that will be required to image the proposal and should limit proposal content to items that provide substance, quality of content, and clarity of information.

4.4 Proposal Format:

- 4.4.1 To facilitate the evaluation process, the vendor is encouraged to organize their proposal into the following sections that correspond with the individual evaluation categories described herein. The vendor is cautioned that it is the vendor's sole responsibility to submit information related to the evaluation categories and that the State of Missouri is under no obligation to solicit such information if it is not included with the proposal. The vendor's failure to submit such information may cause an adverse impact on the evaluation of the proposal. The proposal should be page numbered.
 - a. Signed page one from the original RFP and all signed addendums should be placed at the beginning of the proposal.
 - b. Cost Proposal (Exhibit A: Pricing Page)

Paragraph Revised via Addendum #01

- c. Technical Proposal: The Technical Proposal will include three components: Proposed Methodology, Approach, and Work Plan (Exhibit B), Team Qualifications (Exhibits C and D), and Past Performance (Exhibit E). The Proposed Methodology, Approach, and Work Plan of the Technical Proposal should be limited to no more than 20 pages for each Final Deliverable proposed, including any exhibits related to the Technical Proposal. Standard fonts, 11 point or above, should be used.
 - 1) The Technical Proposal should contain only relevant information that is specific to the topic.
 - 2) The vendor should not include hyperlinks or video clips. In the event the vendor provides hyperlinks or video clips, the information shall not be considered.
- d. Miscellaneous Exhibits/Information:
 - 1) Minority Business Enterprise (MBE)/Women Business Enterprise (WBE) Participation, Organizations for the Blind and Sheltered Workshop Preference, and/or Missouri Service-Disabled Veteran Business Enterprise Participation
 - Exhibit F-Participation Commitment
 - Exhibit G-Documentation of Intent to Participate
 - 2) Miscellaneous Information

- Exhibit H- Business Entity Certification, Enrollment Documentation, and Affidavit of Work Authorization and Documentation (E-Verify)
- Exhibit I- Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion Lower Tier Covered Transaction (Federal Debarment)
- Exhibit J Anti Discrimination Against Israel Act Certification
- Exhibit K-Miscellaneous Information

4.5 Competitive Negotiation of Proposals:

- 4.5.1 The vendor is advised that under the provisions of this Request for Proposal, the Division of Purchasing reserves the right to conduct negotiations of the proposals received or to award a contract without negotiations. If such negotiations are conducted, the following conditions shall apply:
- 4.5.2 Negotiations may be conducted in person, in writing, or by telephone.
- 4.5.3 Negotiations will only be conducted with potentially acceptable proposals. The Division of Purchasing reserves the right to limit negotiations to those proposals which received the highest rankings during the initial evaluation phase. All vendors involved in the negotiation process will be invited to submit a best and final offer.
- 4.5.4 Terms, conditions, prices, methodology, or other features of the vendor's proposal may be subject to negotiation and subsequent revision. As part of the negotiations, the vendor may be required to submit supporting financial, pricing and other data in order to allow a detailed evaluation of the feasibility, reasonableness, and acceptability of the proposal.
- 4.5.5 The mandatory requirements of the Request for Proposal shall <u>not</u> be negotiable and shall remain unchanged unless the Division of Purchasing determines that a change in such requirements is in the best interest of the State of Missouri.

4.6 Evaluation and Award Process:

4.6.1 After determining that a proposal satisfies the mandatory requirements stated in the Request for Proposal, the evaluator(s) shall use both objective analysis and subjective judgment in conducting an assessment of the proposal in accordance with the evaluation criteria stated below and the scoring details delineated in Attachment 1. The contracts shall be awarded to the lowest and best proposals.

Category	Element	Points
COST PROI	POSAL	40 points
TECHNICA	L PROPOSAL	150 points
	thodology, Approach, and Work Plan	90 points
	Analysis Methods for Final Deliverable	55 points
	Data Sources to be Utilized for Final Deliverable	20 points
	Timeline for Milestone #1	15 points
Team Qualifi	cations	30 points
	Leadership Team	15 points
:	Working Team	15 points
Past Perform		30 points
	Overall Relevant Vendor Experience	10 points
	Case Study #1	10 points
	Case Study #2	10 points
MBE/WBE	PARTICIPATION	10 Points
TOTAL	The state of the s	200 points

- 4.6.3 The vendor is advised that an evaluation committee and other subject-matter experts will be used to review and assess the proposals for responsiveness to mandatory requirements of the RFP and in accordance with the subjective evaluation criteria stated in the RFP. The ethical standards of 1 Code of State Regulation (CSR) 40-1.050(7)(O) will apply to evaluators. Vendors can be sanctioned for unauthorized contact with any evaluator under 1 CSR 40-1.060(8)(G) and (H) available at http://www.sos.mo.gov/adrules/csr/csr.asp.
- 4.6.4 After an initial screening process, a question and answer conference or interview may be conducted with the vendor, if deemed necessary by the Division of Purchasing. In addition, the vendor may be asked to make an oral presentation of their proposal during the conference. Attendance cost at the conference shall be at the vendor's expense. Such conference shall be coordinated by the Division of Purchasing.
- 4.6.5 In the event only one proposal is received, the State of Missouri reserves the right to review the proposal to determine if the vendor is responsive, responsible, and reliable. Such determination shall be based upon information submitted in the Technical Proposal.
- 4.6.6 Separate evaluations shall be conducted by each Final Deliverable and awards made accordingly.

4.7 Evaluation of Cost:

- 4.7.1 Pricing The vendor must provide pricing for all line items as required on Exhibit A-Pricing Page.
- 4.7.2 Objective Evaluation of Cost –The cost evaluation shall be based on the price stated on Exhibit A.
 - a. Cost evaluation points shall be determined from the result of the calculation stated above using the following formula:

4.8 Evaluation of Proposed Methodology, Approach, and Work Plan:

- 4.8.1 The Technical Proposal should present a Proposed Methodology, Approach, and Work Plan that demonstrates the method or manner in which the vendor proposes to satisfy the requirements of the RFP using the format on Exhibit B-Technical Proposal-Proposed Methodology, Approach, and Work Plan.
- 4.8.2 The language of the narrative should be straightforward and limited to facts, solutions to problems, and plans of action.
- 4.8.3 The vendor's Proposed Methodology, Approach, and Work Plan will be rated using the adjectival rating system as defined in Table 1 of Attachment 1. Details on the rating and scoring of the Proposed, Methodology, Approach, and Work Plan can be found in Table 2 of Attachment 1.

4.9 Evaluation of Team Qualifications:

- 4.9.1 The Technical Proposal should provide detailed information on the experience and qualifications of the vendor's proposed team using the format on Exhibit C and Exhibit D. The vendor's proposed team should include both the Leadership Team and Working Team.
 - a. Leadership Team: No more than two (2) Leadership Team (i.e. executive level personnel who would have major authority over this project) members' biographies will be considered in the evaluation. For evaluation purposes, only the first two (2) biographies will be considered. Any additional biographies submitted will not be evaluated. One (1) member of the Leadership Team should be identified as the vendor's primary person responsible for the delivery of the project. By including

- their biographies, the vendor is committing the Leadership Team members to support the project, should it be awarded.
- b. Working Team: No more than five (5) Working Team (i.e. GIS Specialist, Data Analyst, Telecommunications Infrastructure Design Specialist, and Communications Coordinator) members' biographies will be considered in the evaluation.
- c. In the event the vendor submits more biographies than requested, for evaluation purposes only the first biographies up to the number requested will be considered. Any additional biographies will not be evaluated.
- 4.9.2 The vendor's Team Qualifications will be rated using the adjectival rating system as defined in Table 3 of Attachment 1. Details on the rating and scoring of the Team Qualifications can be found on Table 4 of Attachment 1.

4.10 Evaluation of Past Performance:

- 4.10.1 The Technical Proposal should provide overall relevant experience and two (2) past performance case studies using the format on Exhibit E. Such case studies should be no longer than one (1) page and summarize the project's context, objectives, approach, and impact achieved relevant to the Proposal. These case studies should have been completed in the past three (3) years. The case studies should involve work for a government agency of similar scale and complexity to the RFP. The case study should include the name and contact information for a client representative who can speak to the scope, quality, and impact of the vendor's work. The State of Missouri may or may not contact these references during the review process. For evaluation purposes, only the first two (2) past performance case studies will be considered. Any additional past performance case studies submitted will not be evaluated.
- 4.10.2 The vendor's past performance will be rated using the adjectival rating system as defined in Table 5 of Attachment 1. Details on the rating and scoring of the Past Performance can be found in Table 6 of Attachment 1.

4.11 Evaluation of Vendor's Minority Business Enterprise (MBE)/ Women Business Enterprise (WBE) Participation:

- 4.11.1 In order for the Division of Purchasing (Purchasing) to meet the provisions of Executive Order 05-30, the vendor should secure participation of certified MBEs and WBEs in providing the products/services required in this RFP. The targets of participation recommended by the State of Missouri are 10% MBE and 5% WBE of the total dollar value of the contract.
 - a. These targets can be met by a qualified MBE/WBE vendor themselves and/or through the use of qualified subcontractors, suppliers, joint ventures, or other arrangements that afford meaningful opportunities for MBE/WBE participation.
 - b. The services performed or the products provided by MBE/WBEs must provide a commercially useful function related to the delivery of the contractually-required service/product in a manner that will constitute an added value to the contract and shall be performed/provided exclusive to the performance of the contract. Therefore, if the services performed or the products provided by MBE/WBEs is utilized, to any extent, in the vendor's obligations outside of the contract, it shall not be considered a valid added value to the contract and shall not qualify as participation in accordance with this clause.
 - c. In order to be considered as meeting these targets, the MBE/WBEs must be "qualified" by the proposal opening date (date the proposal is due). (See below for a definition of a qualified MBE/WBE.)
- 4.11.2 The vendor's proposed participation of MBE/WBE firms in meeting the targets of the RFP will be considered in the evaluation process as specified below:

- a. <u>If Participation Meets Target:</u> Vendors proposing MBE and WBE participation percentages that meet the State of Missouri's target participation percentage of 10% for MBE and 5% for WBE shall be assigned the maximum stated MBE/WBE Participation evaluation points.
- b. <u>If Participation Exceeds Target:</u> Vendors proposing MBE and WBE participation percentages that exceed the State of Missouri's target participation shall be assigned the same MBE/WBE Participation evaluation points as those meeting the State of Missouri's target participation percentages stated above.
- c. <u>If Participation Below Target:</u> Vendors proposing MBE and WBE participation percentages that are lower than the State of Missouri's target participation percentages of 10% for MBE and 5% for WBE shall be assigned a proportionately lower number of the MBE/WBE Participation evaluation points than the maximum MBE/WBE Participation evaluation points.
- d. <u>If No Participation</u>: Vendors failing to propose any commercially useful MBE/WBE participation shall be assigned a score of 0 in this evaluation category.
- 4.11.3 MBE/WBE Participation evaluation points shall be assigned using the following formula:

$$\frac{\text{Vendor's Proposed MBE }\% \leq 10\% + \text{WBE }\% \leq 5\%}{\text{State's Target MBE }\% \ (10) + \text{WBE }\% \ (5)} \\ X \\ \frac{\text{Maximum}}{\text{MBE/WBE}} \\ \text{Participation} \\ \text{Evaluation points} \\ \text{(10)} \\ = \frac{\text{Assigned}}{\text{MBE/WBE}} \\ \text{Participation} \\ \text{points}$$

- 4.11.4 If the vendor is proposing MBE/WBE participation, in order to receive evaluation consideration for MBE/WBE participation, the vendor <u>must</u> provide the following information with the proposal.
 - a. Participation Commitment If the vendor is proposing MBE/WBE participation, the vendor must complete Exhibit F, Participation Commitment, by listing each proposed MBE and WBE, the committed percentage of participation for each MBE and WBE, and the commercially useful products/services to be provided by the listed MBE and WBE. If the vendor submitting the proposal is a qualified MBE and/or WBE, the vendor must include the vendor in the appropriate table on the Participation Commitment Form.
 - b. Documentation of Intent to Participate The vendor must either provide a properly completed Exhibit G, Documentation of Intent to Participate Form, recently signed by each MBE and WBE proposed or must provide a letter of intent recently signed by each MBE and WBE proposed which: (1) must describe the products/services the MBE/WBE will provide and (2) should include evidence that the MBE/WBE is qualified, as defined herein (i.e., the MBE/WBE Certification Number or a copy of MBE/WBE certificate issued by the Missouri OEO). If the vendor submitting the proposal is a qualified MBE and/or WBE, the vendor is not required to complete Exhibit G, Documentation of Intent to Participate Form or provide a recently signed letter of intent.
- 4.11.5 Commitment If the vendor's proposal is awarded, the percentage level of MBE/WBE participation committed to by the vendor on Exhibit F, Participation Commitment, shall be interpreted as a contractual requirement.
- 4.11.6 Definition -- Qualified MBE/WBE:
 - a. In order to be considered a qualified MBE or WBE for purposes of this RFP, the MBE/WBE must be certified by the State of Missouri, Office of Administration, Office of Equal Opportunity (OEO) by the proposal opening date.
 - b. MBE or WBE means a business that is a sole proprietorship, partnership, joint venture, or corporation in which at least fifty-one percent (51%) of the ownership interest is held by minorities or women and

the management and daily business operations of which are controlled by one or more minorities or women who own it.

- c. Minority is defined as belonging to one of the following racial minority groups: African Americans, Native Americans, Hispanic Americans, Asian Americans, American Indians, Native Alaskans, and other groups that may be recognized by the Office of Advocacy, United States Small Business Administration, Washington, D.C.
- 4.11.7 Resources A listing of several resources that are available to assist vendors in their efforts to identify and secure the participation of qualified MBEs and WBEs is available at the website shown below or by contacting the Office of Equal Opportunity (OEO) at:

Office of Administration, Office of Equal Opportunity (OEO)
Harry S Truman Bldg., Room 870-B, P.O. Box 809, Jefferson City, MO 65102-0809
Phone: (877) 259-2963 or (573) 751-8130
Fax: (573) 522-8078

Web site: http://oeo.mo.gov

4.12 Miscellaneous Submittal Information:

- 4.12.1 Organizations for the Blind and Sheltered Workshop Preference Pursuant to section 34.165, RSMo, and 1 CSR 40-1.050, a five to fifteen (5-15) bonus point preference shall be granted to vendors including products and/or services manufactured, produced or assembled by a qualified nonprofit organization for the blind established pursuant to 41 U.S.C. sections 46 to 48c or a sheltered workshop holding a certificate of approval from the Department of Elementary and Secondary Education pursuant to section 178.920, RSMo.
 - 1) In order to qualify for the five to fifteen (5-15) bonus points, the following conditions must be met and the following evidence must be provided:
 - 1) The vendor must either be an organization for the blind or sheltered workshop or must be proposing to utilize an organization for the blind/sheltered workshop as a subcontractor and/or supplier in an amount that must equal, at a minimum, the greater of \$5,000 or 2% of the total dollar value of the contract for purchases not exceeding \$10 million.
 - 2) The services performed or the products provided by the organization for the blind or sheltered workshop must provide a commercially useful function related to the delivery of the contractually required service/product in a manner that will constitute an added value to the contract and shall be performed/provided exclusive to the performance of the contract. Therefore, if the services performed or the products provided by the organization for the blind or sheltered workshop are utilized, to any extent, in the vendor's obligations outside of the contract, it shall not be considered a valid added value to the contract and shall not qualify as participation in accordance with this clause.
 - 3) If the vendor is proposing participation by an organization for the blind or sheltered workshop, in order to receive evaluation consideration for participation by the organization for the blind or sheltered workshop, the vendor must provide the requested information with the proposal.
 - 4) A sliding scale for the award of points shall range from a minimum of five (5) points to a maximum of fifteen (15) points. The award of the minimum five (5) points shall be based on the proposal containing a commitment that the participating nonprofit organization or workshop is providing the greater of two percent (2%) or five thousand dollars (\$5,000) of the total contract value of proposals for purchases not exceeding ten (10) million dollars.
 - b. Where the commitment in the proposal exceeds the minimum level set forth in section 34.165, RSMo to obtain five (5) points, the awarded points shall exceed the minimum five (5) points, up to a maximum of fifteen (15) points. As the statute sets out a minimum of five (5) points for a minimum two percent (2%) commitment, each percent of commitment is worth two and one-half (2.5) points. The formula to determine the awarded points for commitments above the two percent (2%) minimum

shall be calculated based on the commitment in the proposal (which in the formula will be expressed as a number [Vendor's Commitment Number below], not as a percentage) times two and one-half (2.5) points:

Vendor's Commitment Number x 2.5 points = Awarded Points

Examples: A commitment of three percent (3%) would be calculated as: 3×2.5 points = 7.5 awarded points. A commitment of five and one-half percent (5.5%) would be calculated as: 5.5×2.5 points = 13.75 awarded points. If, instead of a percentage, a vendor's proposal lists a dollar figure that is over the minimum amount, the dollar figure shall be converted into the percentage of the vendor's total contract value for calculation of the awarded points. Commitments at or above six percent (6%) receive the maximum of fifteen (15) points.

- 1) Participation Commitment The vendor must complete Exhibit F, Participation Commitment, by identifying the organization for the blind or sheltered workshop, the amount of participation committed, and the commercially useful products/services to be provided by the listed organization for the blind or sheltered workshop. If the vendor submitting the proposal is an organization for the blind or sheltered workshop, the vendor must be listed in the appropriate table on the Participation Commitment Form.
- 2) Documentation of Intent to Participate The vendor must either provide a properly completed Exhibit G, Documentation of Intent to Participate Form, or letter of intent recently signed by the proposed organization for the blind or sheltered workshop which: (1) must describe the products/services the organization for the blind/sheltered workshop will provide and (2) should include evidence of the organization for the blind/sheltered workshop qualifications (e.g. copy of certificate or Certificate Number for Missouri Sheltered Workshop).

NOTE: If the vendor submitting the proposal is an organization for the blind or sheltered workshop, the vendor is not required to complete Exhibit G, Documentation of Intent to Participate Form or provide a letter of intent.

c. A list of Missouri sheltered workshops can be found at the following Internet address:

Listing of Missouri Sheltered Workshops:
http://dese.mo.gov/special-education/sheltered-workshops/directories
Missouri Sheltered Workshop Products/Services Locator:
http://moworkshops.org/services.html

d. The websites for the Missouri Lighthouse for the Blind and the Alphapointe Association for the Blind can be found at the following Internet addresses:

http://www.lhbindustries.com http://www.alphapointe.org

- e. Commitment If the vendor's proposal is awarded, the organization for the blind or sheltered workshop participation committed to by the vendor on Exhibit F, Participation Commitment, shall be interpreted as a contractual requirement.
- 4.12.2 Service-Disabled Veteran Business Enterprises (SDVEs) Pursuant to section 34.074, RSMo, and 1 CSR 40-1.050, the Division of Purchasing (Purchasing) has a goal of awarding three (3) percent of all contracts for the performance of any job or service to qualified service-disabled veteran business enterprises (SDVEs). A three (3) point bonus preference shall be granted to vendors including products and/or services manufactured, produced or assembled by a qualified SDVE.
 - a. In order to qualify for the three bonus points, the following conditions must be met and the following evidence must be provided:

- 1) The vendor must either be an SDVE or must be proposing to utilize an SDVE as a subcontractor and/or supplier that provides at least three percent (3%) of the total contract value.
- 2) The services performed or the products provided by the SDVE must provide a commercially useful function related to the delivery of the contractually-required service/product in a manner that will constitute an added value to the contract and shall be performed/provided exclusive to the performance of the contract. Therefore, if the services performed or the products provided by the SDVE are utilized, to any extent, in the vendor's obligations outside of the contract, it shall not be considered a valid added value to the contract and shall not qualify as participation in accordance with this clause.
- 3) In order to receive evaluation consideration for participation by an SDVE, the vendor <u>must</u> provide the following information with the proposal:
 - Participation Commitment The vendor must complete Exhibit F, Participation Commitment, by identifying each proposed SDVE, the committed percentage of participation for each SDVE, and the commercially useful products/services to be provided by the listed SDVE. If the vendor submitting the proposal is a qualified SDVE, the vendor must be listed in the appropriate table on the Participation Commitment Form.
 - Documentation of Intent to Participate The vendor must either provide a properly completed Exhibit G, Documentation of Intent to Participate Form or letter of intent recently signed by the proposed SDVE which: (1) must describe the products/services the SDVE will provide and (2) must include the SDV Documents described below as evidence that the SDVE is qualified, as defined herein.
 - Service-Disabled Veteran (SDV) Documents If a participating organization is an SDVE, unless previously submitted within the past three (3) years to the Purchasing, the vendor <u>must</u> provide the following Service-Disabled Veteran (SDV) documents:
 - ✓ a copy of the SDV's Certificate of Release or Discharge from Active Duty (DD Form 214), and
 - ✓ a copy of the SDV's disability rating letter issued by the Department of Veterans
 Affairs establishing a service connected disability rating, or a Department of Defense
 determination of service connected disability.

NOTE:

- a) If the vendor submitting the proposal is a qualified SDVE, the vendor must include the SDV Documents as evidence that the vendor qualifies as an SDVE. However, the vendor is not required to complete Exhibit G, Documentation of Intent to Participate Form or provide a recently dated letter of intent.
- b) If the SDVE and SDV are listed on the following internet address, the vendor is not required to provide the SDV Documents listed above. http://oa.mo.gov/sites/default/files/sdvelisting.pdf
- Commitment If awarded a contract, the SDVE participation committed to by the vendor on Exhibit F, Participation Commitment, shall be interpreted as a contractual requirement.
- c. Definition Qualified SDVE:
 - SDVE is doing business as a Missouri firm, corporation, or individual or maintaining a Missouri
 office or place of business, not including an office of a registered agent;

- 2) SDVE has not less than fifty-one percent (51%) of the business owned by one (1) or more service-disabled veterans (SDVs) or, in the case of any publicly-owned business, not less than fifty-one percent (51%) of the stock of which is owned by one (1) or more SDVs;
- 3) SDVE has the management and daily business operations controlled by one (1) or more SDVs;
- 4) SDVE has a copy of the SDV's Certificate of Release or Discharge from Active Duty (DD Form 214), and a copy of the SDV's disability rating letter issued by the Department of Veterans Affairs establishing a service connected disability rating, or a Department of Defense determination of service connected disability; and
- 5) SDVE possesses the power to make day-to-day as well as major decisions on matters of management, policy, and operation.
- 4.12.3 Affidavit of Work Authorization and Documentation Pursuant to section 285.530, RSMo, if the vendor meets the section 285.525, RSMo, definition of a "business entity" ((http://www.moga.mo.gov/mostatutes/stathtml/28500005301.html?&me=285.530), the vendor must affirm the vendor's enrollment and participation in the E-Verify federal work authorization program with respect to the employees hired after enrollment in the program who are proposed to work in connection with the services requested herein. The vendor should complete applicable portions of Exhibit H, Business Entity Certification, Enrollment Documentation, and Affidavit of Work Authorization. The applicable portions of Exhibit H must be submitted prior to an award of a contract.
- 4.12.4 Debarment Certification The vendor certifies by signing the signature page of this original document and any addendum signature page(s) that the vendor is not presently debarred, suspended, proposed for debarment, declared ineligible, voluntarily excluded from participation, or otherwise excluded from or ineligible for participation under federal assistance programs. The vendor should complete and return the attached certification regarding debarment, etc., Exhibit I with the proposal. This document must be satisfactorily completed prior to award of the contract.
- 4.12.5 Anti-Discrimination Against Israel Act Certification Exhibit Instructions Regardless of company status or number of employees, vendor is requested to complete and submit the applicable portion of Exhibit J -Anti-Discrimination Against Israel Act Certification with their response. Pursuant to section 34.600, RSMo, vendor meets the section 34.600, RSMo, definition of (https://revisor.mo.gov/main/OneSection.aspx?section=34.600) and the vendor has ten or more employees, the vendor must certify in writing that the vendor is not currently engaged in a boycott of goods or services from the State of Israel as defined in section 34.600, RSMo, and shall not engage in a boycott of goods or services from the State of Israel, if awarded a contract, for the duration of the contract. The applicable portion of the exhibit must be submitted prior to an award of a contract.
- 4.12.6 The vendor should complete and submit Exhibit K, Miscellaneous Information.
- 4.12.7 Business Compliance The vendor must be in compliance with the laws regarding conducting business in the State of Missouri. The vendor certifies by signing the signature page of this original document and any addendum signature page(s) that the vendor and any proposed subcontractors either are presently in compliance with such laws or shall be in compliance with such laws prior to any resulting contract award. The vendor shall provide documentation of compliance upon request by the Division of Purchasing. The compliance to conduct business in the state shall include, but not necessarily be limited to:
 - a. Registration of business name (if applicable) with the Secretary of State at http://sos.mo.gov/business/startBusiness.asp
 - b. Certificate of authority to transact business/certificate of good standing (if applicable)
 - c. Taxes (e.g., city/county/state/federal)
 - d. State and local certifications (e.g., professions/occupations/activities)
 - e. Licenses and permits (e.g., city/county license, sales permits)

f. Insurance (e.g., worker's compensation/unemployment compensation)

The vendor should refer to the Missouri Business Portal at http://business.mo.gov for additional information.

END OF PART FOUR: PROPOSAL SUBMISSION INFORMATION AND REQUIREMENTS

EXHIBIT A PRICING PAGE

Broadband Infrastructure Analysis Services – For each Final Deliverable proposed, the vendor shall provide a firm fixed total price for providing the Final Deliverable required herein in accordance with the provisions and requirements of this RFP. All costs associated with providing the required services, including travel expenses, shall be included in the stated price.

Line Item	Deliverable	Firm, Fixed Total Price
1	Final Deliverable #1 – Broadband Infrastructure Gap Analysis and Cost Model	\$
2	Final Deliverable #2- Tower Infrastructure Analysis	\$

EXHIBIT B TECHNICAL PROPOSAL PROPOSED METHODOLOGY, APPROACH, AND WORK PLAN

Directions for Vendor: The vendor should present a written plan for performing the requirements specified in Section 2, Scope of Work, and Contractual Requirements. The Proposed Methodology, Approach, and Work Plan should be no longer than **20 pages**. Standard fonts, 11 point or above, should be used.

Place a check in the appropriate box below for the Final Deliverable proposed. If proposing both Final Deliverables, copy and complete Exhibit B for each proposed Final Deliverable.	
☐ Final Deliverable #1	☐ Final Deliverable #2

In presenting the Proposed Methodology, Approach, and Work Plan, the vendor should discuss the following areas.

- 1) Analysis Method for Final Deliverable
- 2) Data Sources to be Utilized for Final Deliverable
- 3) Timeline for Milestone #1-The vendor should provide a timeline for how they will be the timeframe for Milestone #1.
 - a. Economic Impact to Missouri the vendor should describe the economic advantages that will be realized as a result of the vendor performing the required services. The vendor should respond to the following:
 - Provide a description of the proposed services that will be performed and/or the proposed products that will be provided by Missourians and/or Missouri products.
 - Provide a description of the economic impact returned to the State of Missouri through tax revenue obligations.
 - Provide a description of the company's economic presence within the State of Missouri (e.g., type
 of facilities: sales offices; sales outlets; divisions; manufacturing; warehouse; other), including
 Missouri employee statistics.

EXHIBIT C TECHNICAL PROPOSAL TEAM QUALIFICATIONS – LEADERSHIP TEAM MEMBER BIOGRAPHIES

Directions for Vendor: No more than two (2) Leadership Team members' biographies will be considered in the evaluation. Biographies should be submitted in the attached format. One (1) member of the Leadership Team should be identified as the vendor's primary person responsible for the delivery of the project. By including their biographies, the vendor is committing the Leadership Team members to support the project, should it be awarded.

Name:				
Title:				
Proposed project role:				
, 0 02 02222	to			
project:		7 11 21		
Final Deliverable	1	Deliverable #1		
	☐ Final	Deliverable #2		
ducation, certifications, and o	ther distincti	ons:	Data	
Degree, certification, or other		Institution	2010	
Example: BA, Business Adminis	stration	Washington University in Saint Louis	2014	
Example: MBA, Marketing		Northwestern University		
Example: Lean Six Sigma Black	k Belt	Villanova University (online)	2017	
Employment history:			Dates	
Organization	Role		Dates	
Example: Current Co.		leader of organization design practice	2014-present	
	Dinactor Str	ategy and Continuous Improvement	2010-2012	
Example: Company ABC	Director, bire			
Example: Company ABC	Director, bire			
Example: Company ABC	Director, Sire			
Example: Company ABC Specific experience relevant to	project:			
	project: Years of	Brief description of relevant expe	rience (e.g., spec	
Specific experience relevant to Topic	project:		rience (e.g., spec	
Specific experience relevant to Topic Experience with managing	project: Years of	Brief description of relevant expe	rience (e.g., spec	
Specific experience relevant to Topic	project: Years of	Brief description of relevant expe	rience (e.g., spec	
Experience with managing projects of similar size and scope	project: Years of	Brief description of relevant expe	rience (e.g., spec	
Experience with managing projects of similar size and scope Experience managing	project: Years of	Brief description of relevant expe	rience (e.g., spec	
Experience with managing projects of similar size and scope Experience managing conflict resolution	project: Years of	Brief description of relevant expe	rience (e.g., spec	
Experience with managing projects of similar size and scope Experience managing conflict resolution If proposing Final	project: Years of	Brief description of relevant expe	rience (e.g., spec	
Experience with managing projects of similar size and scope Experience managing conflict resolution	project: Years of	Brief description of relevant expe	rience (e.g., spec	
Experience with managing projects of similar size and scope Experience managing conflict resolution If proposing Final Deliverable #1-experience with analyzing and	project: Years of	Brief description of relevant expe	rience (e.g., spec	
Experience with managing projects of similar size and scope Experience managing conflict resolution If proposing Final Deliverable #1-experience	project: Years of	Brief description of relevant expe	rience (e.g., spec	
Experience with managing projects of similar size and scope Experience managing conflict resolution If proposing Final Deliverable #1-experience with analyzing and evaluating broadband deployment and upgrade.	project: Years of experience	Brief description of relevant expe	rience (e.g., spec	
Experience with managing projects of similar size and scope Experience managing conflict resolution If proposing Final Deliverable #1-experience with analyzing and evaluating broadband deployment and upgrade.	project: Years of experience	Brief description of relevant expe	rience (e.g., spec	
Experience with managing projects of similar size and scope Experience managing conflict resolution If proposing Final Deliverable #1-experience with analyzing and evaluating broadband deployment and upgrade. If proposing Final	project: Years of experience	Brief description of relevant expe	rience (e.g., spec	
Experience with managing projects of similar size and scope Experience managing conflict resolution If proposing Final Deliverable #1-experience with analyzing and evaluating broadband deployment and upgrade. If proposing Final Deliverable #2-experience	project: Years of experience	Brief description of relevant expe	rience (e.g., spec	
Experience with managing projects of similar size and scope Experience managing conflict resolution If proposing Final Deliverable #1-experience with analyzing and evaluating broadband deployment and upgrade. If proposing Final Deliverable #2-experience with analyzing and management and upgrade.	project: Years of experience	Brief description of relevant expe	rience (e.g., spec	
Experience with managing projects of similar size and scope Experience managing conflict resolution If proposing Final Deliverable #1-experience with analyzing and evaluating broadband deployment and upgrade. If proposing Final Deliverable #2-experience with analyzing and evaluating cellular network	project: Years of experience	Brief description of relevant expe	rience (e.g., spec	
Experience with managing projects of similar size and scope Experience managing conflict resolution If proposing Final Deliverable #1-experience with analyzing and evaluating broadband deployment and upgrade. If proposing Final Deliverable #2-experience with analyzing and evaluating deployment and upgrade.	project: Years of experience	Brief description of relevant expe	rience (e.g., spec	
Experience with managing projects of similar size and scope Experience managing conflict resolution If proposing Final Deliverable #1-experience with analyzing and evaluating broadband deployment and upgrade. If proposing Final Deliverable #2-experience with analyzing and evaluating cellular network	project: Years of experience	Brief description of relevant expe	rience (e.g., spec	

EXHIBIT D TECHNICAL PROPOSAL TEAM QUALIFICATIONS – WORKING TEAM MEMBER BIOGRAPHIES

Directions for Vendor: No more than five (5) Working Team members' biographies will be considered in the evaluation. Biographies should be submitted in the attached format.

Name:					
Title:					
Proposed project role:	☐ GIS S ₁	☐ GIS Specialist			
	1	Analyst			
	☐ Telecommunications Infrastructure Design Specialist				
	. I				
	☐ Communications Coordinator				
% of time committed to)				
project:					
Final Deliverable		Deliverable #1			
	☐ Final	Deliverable #2			
Education, certifications, and ot	her distincti				
Degree, certification, or other		Institution	Date		
Example: BA, Business Administ	ration	Washington University in Saint Louis	2010		
Example: MBA, Marketing	•	Northwestern University	2014		
Example: Lean Six Sigma Black	Belt	Villanova University (online)	2017		
Employment history:					
	Role		Dates		
	Consultant		2014-present		
	Sales Associa	te, Southeast Region	2010-2012		
Specific experience relevant to	project:				
	Years of	Brief description of relevant expe	rience (e.g., specific		
	experience	projects; previous employment)			
GIS Specialist -experience	•				
with visual datasets and					
models in ArcGIS platforms					
•					
Data Analyst -experience in					
working with analyzing					
complex datasets provided by					
public agencies and					
proprietary collections					
proprietary contraction					
Telecommunications					
Infrastructure Design					
Specialist - Experience as a					
professional engineer (PE) or					
staff with certifications.					
Statt With Continuations.					

Communication Coordinator — experience creating and compiling client reports and developing content that is easy to understand for non-technical audiences.	
If proposing Final Deliverable #1-experience with broadband deployment	
and upgrade. If proposing Final Deliverable #2-experience with cellular network design, deployment and upgrade.	
Other	

Other experience or background information:

EXHIBIT E TECHNICAL PROPOSAL PAST PERFORMANCE

Directions to Vendor: The vendor should provide the overall relevant vendor experience related to this RFP and reflective of the contractor qualifications in section 2.2.

(succinctly ident	Overall Relevant Vendor Experience ify experience in each of the qualification areas identified below)
Final Deliverable #1-If the vendor is	s proposing to provide Final Deliverable #1, the vendor should identify the following areas of experience for the vendor.
Experience with broadband, with special familiarity and utilization of the Connect broadband and wireless cost modeling, with special familiarity and utilization of the Connect America Cost Model (CACM).	
Experience in analyzing complex datasets provided by public agencies and proprietary collections including demonstrating a strong grasp of the multitude on data layers required to complete these analyses from both the public and private sector.	
Experience with broadband deployment and upgrade.	
Experience with telecommunications engineering principles in installing superior installations for Fiber to the Home (FTTH) and fixed wireless.	
Experience delivering east to understand analyses for non-technical audiences.	
Final Deliverable #2-If the vendor	is proposing to provide Final Deliverable #2, the vendor should identify the following areas of experience for the vendor.

Experience in analyzing complex datasets provided by public agencies and proprietary collections. Additionally, the contractor must demonstrate a	·
strong grasp of the multitude on data layers required to complete these analyses from both the public and private sector.	
Experience with cellular network design, deployment and upgrade.	
Experience with telecommunications engineering principles in installing superior installations for cellular networks.	
Experience delivering east to understand analyses for non-technical audiences.	

EXHIBIT E TECHNICAL PROPOSAL-CONTINUED PAST PERFORMANCE CONTINUED

Directions to Vendor: The vendor should provide two (2) past performance reference case studies. Each should have been completed in the past three (3) years. The vendor should copy and complete this Exhibit for each case study presented. The two (2) case studies should represent the vendor's most relevant and recent experience that most closely aligns with the vendor's services proposed herein.

	CASE STUDY
Project Title	THE SHARKS
Duration of the Project	
Specific Contact Information:	Organization Name:
	Contact Person Name:
·	Telephone Number:
	Email Address:
The vendor should summarize b	elow the past project's context, objectives, approach and impact achieved relevant
to this RFP.	
,	
·	
,	
,	
·	

Final Deliverable #1

EXHIBIT F PARTICIPATION COMMITMENT

Minority Business Enterprise/Women Business Enterprise (MBE/WBE) and/or Organization for the Blind/Sheltered Workshop and/or Service-Disabled Veteran Business Enterprise (SDVE) Participation Commitment — If the vendor is committing to participation by or if the vendor is a qualified MBE/WBE and/or organization for the blind/sheltered workshop and/or a qualified SDVE, the vendor must provide the required information in the appropriate table(s) below for the organization proposed and must submit the completed exhibit with the vendor's proposal.

For Minority Business Enterprise (MBE) and/or Woman Business Enterprise (WBE) Participation, if proposing an entity certified as both MBE and WBE, the vendor must either (1) enter the participation percentage under MBE or WBE, or must (2) divide the participation between both MBE and WBE. If dividing the participation, do not state the total participation on both the MBE and WBE Participation Commitment tables below. Instead, divide the total participation as proportionately appropriate between the tables below.

Place a check in the appropriate box below for the Final Deliverable proposed. There should only be <u>ONE</u> box checked. If proposing both Final Deliverables, copy and complete this Participation Commitment Exhibit for each proposed Final Deliverable.

☐ Final Deliverable #2

		Commitment Table			
(The services performed or the products provided by the listed MBE must provide a commercially useful function					
related to the delivery of the contractually-required service/product in a manner that will constitute an added					
value to the contract and shall be performed/provided exclusive to the performance of the contract.)					
	Committed	Description of Products/Services to be Provided by			
	Percentage of	Listed MBE			
Name of Each Qualified Minority	Participation	The vendor should also include the paragraph			
Business Enterprise (MBE)	for Each MBE	number(s) from the RFP which requires the			
Proposed	(% of the Actual	product/service the MBE is proposed to perform and			
·	Total Contract	describe how the proposed product/service constitutes			
	Value)	added value and will be exclusive to the contract.			
1.		Product/Service(s) proposed:			
	%	RFP Paragraph References:			
		Control of the Contro			
2.		Product/Service(s) proposed:			
	%				
	70.	RFP Paragraph References:			
3.		Product/Service(s) proposed:			
	%				
	70	RFP Paragraph References:			
4.		Product/Service(s) proposed:			
	0/0				
	/*	RFP Paragraph References:			
Total MBE Percentage:	0/0				

WBE Participation Commitment Table

(The services performed or the products provided by the listed WBE must provide a commercially useful function related to the delivery of the contractually-required service/product in a manner that will constitute an added value to the contract and shall be performed/provided exclusive to the performance of the contract.)

Name of Each Qualified Women Business Enterprise (WBE) proposed	Committed Percentage of Participation for Each WBE (% of the Actual Total Contract Value)	Description of Products/Services to be Provided by Listed WBE The vendor should also include the paragraph number(s) from the RFP which requires the product/service the WBE is proposed to perform and describe how the proposed product/service constitutes added value and will be exclusive to the contract.
1.	%	Product/Service(s) proposed: RFP Paragraph References:
2.	%	Product/Service(s) proposed: RFP Paragraph References:
3.	9/6	Product/Service(s) proposed: RFP Paragraph References:
4.	%	Product/Service(s) proposed: RFP Paragraph References:
Total WBE Percentage:	%	

Organization for the Blind/Sheltered Workshop Commitment Table

- The services performed or the products provided by the listed Organization for the Blind/Sheltered Workshop must provide a commercially useful function related to the delivery of the contractually-required service/product in a manner that will constitute an added value to the contract and shall be performed/provided exclusive to the performance of the contract.
- The vendor must either be an organization for the blind or sheltered workshop or must be proposing to utilize an organization for the blind/sheltered workshop as a subcontractor and/or supplier in an amount that must equal, at a minimum, the greater of \$5,000 or 2% of the total dollar value of the contract for purchases not exceeding \$10 million.
- The vendor may propose more than one organization for the blind/sheltered workshop as part of the vendor's total committed participation. However, the services performed or products provided must still meet the requirements noted herein.

Name of Organization for the Blind or Sheltered Workshop Proposed	Committed Participation (\$ amount or % of total value of contract)	Description of Products/Services to be Provided by Listed Organization for the Blind/Sheltered Workshop The vendor should also include the paragraph number(s) from the RFP which requires the product/service the organization for the blind/sheltered workshop is proposed to perform and describe how the proposed product/service constitutes added value and will be exclusive to the contract.
2.		Product/Service(s) proposed: RFP Paragraph References: Product/Service(s) proposed: RFP Paragraph References:
Total Blind/Sheltered Workshop Percentage:	%	AFF Faragraph References.

SDVE Participation Commitment Table (The services performed or the products provided by the listed SDVE must provide a commercially useful function related to the delivery of the contractually-required service/product in a manner that will constitute an added value to the contract and shall be performed/provided exclusive to the performance of the contract.) Description of Products/Services to be Provided by Committed Listed SDVE Percentage of The vendor should also include the paragraph Participation Name of Each Qualified Servicenumber(s) from the RFP which requires the for Each SDVE **Disabled Veteran Business** product/service the SDVE is proposed to perform and (% of the Actual Enterprise (SDVE) Proposed describe how the proposed product/service constitutes Total Contract added value and will be exclusive to the contract. Value) Product/Service(s) proposed: 1. % RFP Paragraph References: Product/Service(s) proposed: 2. % RFP Paragraph References: **Total SDVE Percentage:**

EXHIBIT G

DOCUMENTATION OF INTENT TO PARTICIPATE

If the vendor is proposing to include the participation of a Minority Business Enterprise/Women Business Enterprise (MBE/WBE) and/or Organization for the Blind/Sheltered Workshop and/or qualified Service-Disabled Veteran Business Enterprise (SDVE) in the provision of the products/services required in the RFP, the vendor must either provide this Exhibit or letter of intent recently signed by the proposed MBE/WBE, Organization for the Blind, Sheltered Workshop, and/or SDVE documenting the following information with the vendor's proposal.

Indicate appropria MBE	te business c WBE	lassification(s): Organization for the Blind	Sheltered Wo	orkshop	SDVE
Name of Organiza	tion:				
(Name of MBE, V	VBE, Organi	zation for the Blind, Sheltered Wor			
Contact Name:			Email:		
Address (If provide MO Addr	SDVE, ess):		Phone #:		
City:			Fax #:		
State/Zip:			Certification #		
SDVE's Website			Certification	(or attach	copy o
Address:			Expiration Date:	certification)	
Service-Disabled			SDV's		
Veteran's (SDV)	Name:		Signature:		····
Please Print)					
PROD	UCTS/SER	VICES PARTICIPATING ORG	ANIZATION AGR	EED TO PRO	VIDE

EXHIBIT G (continued)

DOCUMENTATION OF INTENT TO PARTICIPATE

SERVICE-DISABLED VETERAN BUSINESS ENTERPRISE (SDVE)

If a participating organization is an SDVE, unless the Service-Disabled Veteran (SDV) documents were previously submitted within the past three (3) years to the Division of Purchasing (Purchasing), the vendor <u>must</u> provide the following SDV documents:

✓ a copy of the SDV's Certificate of Release or Discharge from Active Duty (DD Form 214), and a copy of the SDV's disability rating letter issued by the Department of Veterans Affairs establishing a service connected disability rating, or a Department of Defense determination of service connected disability.

(NOTE: The SDV's Certificate of Release or Discharge from Active Duty (DD Form 214), and the SDV's disability rating letter issued by the Department of Veterans Affairs establishing a service connected disability rating, or Department of Defense determination of service connected disability shall be considered confidential pursuant to subsection 14 of section 610.021, RSMo.)

The vendor should check the appropriate statement below and, if applicable, provide the requested information.

- No, I have not previously submitted the SDV documents specified above to Purchasing and therefore have enclosed the SDV documents.
- Yes, I previously submitted the SDV documents specified above within the past three (3) years to Purchasing.

Date SDV Documents were Submitted:	
Previous Proposal/Contract Number for Which the SDV Documents were Submitted: (if applicable and known)	

(NOTE: If the proposed SDVE and SDV are listed on the Purchasing SDVE database located at http://oa.mo.gov/sites/default/files/sdvelisting.pdf, then the SDV documents have been submitted to Purchasing within the past three [3] years. However, if it has been determined that an SDVE at any time no longer meets the requirements stated above, Purchasing will remove the SDVE and associated SDV from the database.)

FOR STATE USE ONLY		
SDV Documents - Verification Complete	ed By:	
Buyer	Date	

EXHIBIT H

BUSINESS ENTITY CERTIFICATION, ENROLLMENT DOCUMENTATION, AND AFFIDAVIT OF WORK AUTHORIZATION

BUSINESS ENTITY CERTIFICATION:

The vendor must certify their current business status by completing either Box A or Box B or Box C on this Exhibit.

BOX A:	To be completed by a non-business entity as defined below.
BOX B:	To be completed by a business entity who has not yet completed and submitted documentation
	pertaining to the federal work authorization program as described at http://www.uscis.gov/e-verity.
BOX C:	To be completed by a business entity who has current work authorization documentation on file with
	a Missouri state agency including Division of Purchasing.

Business entity, as defined in section 285.525, RSMo, pertaining to section 285.530, RSMo, is any person or group of persons performing or engaging in any activity, enterprise, profession, or occupation for gain, benefit, advantage, or livelihood. The term "business entity" shall include but not be limited to self-employed individuals, partnerships, corporations, contractors, and subcontractors. The term "business entity" shall include any business entity that possesses a business permit, license, or tax certificate issued by the state, any business entity that is exempt by law from obtaining such a business permit, and any business entity that is operating unlawfully without such a business permit. The term "business entity" shall not include a self-employed individual with no employees or entities utilizing the services of direct sellers as defined in subdivision (17) of subsection 12 of section 288.034, RSMo.

Note: Regarding governmental entities, business entity includes Missouri schools, Missouri universities, out of state agencies, out of state schools, out of state universities, and political subdivisions. A business entity does not include Missouri state agencies and federal government entities.

BOX A – CURRENTLY NOT	A BUSINESS ENTITY
	dual Name) DOES NOT CURRENTLY MEET the 525, RSMo pertaining to section 285.530, RSMo as
I am a self-employed individual with no em	
☐ - The company that I represent employs the s (17) of subsection 12 of section 288.034, RSMo	ervices of direct sellers as defined in subdivision .
I certify that I am not an alien unlawfully present in (Company/Individual Name) is awarded a contract for the Number) and if the business status changes during the life in section 285.525, RSMo pertaining to section 285.530, as a business entity,(Company with the requirements stated in Box B and provide the Di in Box B of this exhibit.	e services requested herein under(RFP) of the contract to become a business entity as defined RSMo then, prior to the performance of any services
Authorized Representative's Name (Please Print)	Authorized Representative's Signature
Company Name (if applicable)	Date

EXHIBIT H, continued

(Complete the following if you DO NOT have the E-Verify documentation and a current Affidavit of Work Authorization already on file with the State of Missouri. If completing Box B, do not complete Box C.)

	BOX B – CURRENT BUSINESS	ENTITY STATUS
I certify the defined in	that(Business Entity Name) in section 285.525, RSMo pertaining to section 285.530	MEETS the definition of a business entity as
	thorized Business Entity Representative's me (Please Print) Au Re	thorized Business Entity presentative's Signature
Busi	siness Entity Name Da	ate
	Mail Address	
As a busi	siness entity, the vendor must perform/provide each of tompletion/submission of all of the following:	he following. The vendor should check each to
-	Enroll and participate in the E-Verify federal work at http://www.uscis.gov/e-verify ; Phone: 888-464-4218 employees hired after enrollment in the program who services required herein;	: Email: e-verify@dhs.gov) with respect to the
	AND	
	Verify federal work authorization program. Documentation shall include EITHER the E-Verify Employment Eligibility Verification page listing the vendor's name and company ID OR a page from the E-Verify Memorandum of Understanding (MOU) listing the vendor's name and the MOU signature page completed and signed, at minimum, by the vendor and the Department of Homeland Security – Verification Division. If the signature page of the MOU lists the vendor's name and company ID, then no additional pages of the MOU must be submitted;	
	AND	
	Submit a completed, notarized Affidavit of Work Au Exhibit.	uthorization provided on the next page of this

EXHIBIT H, continued

AFFIDAVIT OF WORK AUTHORIZATION:

The vendor who meets the section 285.525, Affidavit of Work Authorization.	RSMo, definition of a business entity must complete and return t	he following
Comes now(Position/Title)	first being duly sworn on my oath, affirm	ntative) as
(Business Entity Name) is enrolled and will with respect to employees hired after enrolled related to contract(s) with the State of M	Il continue to participate in the E-Verify federal work authorizar ment in the program who are proposed to work in connection with dissouri for the duration of the contract(s), if awarded in accordance also affirm that (Business Entity Name is an unauthorized alien in connection with the contracted service.	h the services ordance with
In Affirmation thereof, the facts stated statements made in this filing are subject	above are true and correct. (The undersigned understand to the penalties provided under section 575.040, RSMo.)	ds that false
Authorized Representative's Signature	Printed Name	
Title	Date	
E-Mail Address	E-Verify Company ID Number	
· · · · · · · · · · · · · · · · · · ·		
*		
Subscribed and sworn to before me this _	Of of I am	
commissioned as a notary public within the	ne County of, State of, State of	
(NAME OF STATE), and my com	nmission expires on	
Signature of Notary	Date	

	. 4565 TOPENSAG
RFPX300349020	k transfer

EXHIBIT H, continued

(Complete the following if you have the E-Verify documentation and a current Affidavit of Work Authorization already on file with the State of Missouri. If completing Box C, do not complete Box B.)

BOX C – AFFIDAVIT ON FILE - CUR	RENT BUSINESS ENTITY STATUS
fined in section 285.525, RSMo pertaining to secti- rticipates in the E-Verify federal work authorization rollment in the program who are proposed to work in	Name) MEETS the definition of a business entity as on 285.530, RSMo and have enrolled and currently a program with respect to the employees hired after connection with the services related to contract(s) with commentation to a Missouri state agency that affirms a k authorization program. The documentation that was
Memorandum of Understanding (Memorandum of Un	lity Verification page OR a page from the E-Verification page OR a page from the E-Verification (In the Mousignature vendor and the Department of Homeland Security Work Authorization (must be completed, signed, anoths).
ame of Missouri State Agency to Which Previous E-V	Verify Documentation Submitted:
•	
•	
•	
evious Bid/Contract Number for Which Previous E- Authorized Business Entity Representative's	Verify Documentation Submitted: (if known Authorized Business Entity
Authorized Business Entity Representative's Name (Please Print)	Verify Documentation Submitted:(if known Authorized Business Entity Representative's Signature
Authorized Business Entity Representative's Name (Please Print) Business Entity Name E-Mail Address	Verify Documentation Submitted:(if known Authorized Business Entity Representative's Signature Date
Name (Please Print) Business Entity Name	Verify Documentation Submitted:(if known Authorized Business Entity Representative's Signature Date

EXHIBIT I

<u>Certification Regarding</u> <u>Debarment, Suspension, Ineligibility and Voluntary Exclusion</u> <u>Lower Tier Covered Transactions</u>

This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 29 CFR Part 98 Section 98.510, Participants' responsibilities. The regulations were published as Part VII of the May 26, 1988, Federal Register (pages 19160-19211).

(BEFORE COMPLETING CERTIFICATION, READ INSTRUCTIONS FOR CERTIFICATION)

- (1) The prospective recipient of Federal assistance funds certifies, by submission of this proposal, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- Where the prospective recipient of Federal assistance funds is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

Company Name	DUNS # (if known)	-
Authorized Representative's Printed Name	Authorized Representative's Title	-
Authorized Representative's Signature	Date	_

Instructions for Certification

- 1. By signing and submitting this proposal, the prospective recipient of Federal assistance funds is providing the certification as set out below.
- The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later
 determined that the prospective recipient of Federal assistance funds knowingly rendered an erroneous certification, in addition to other remedies
 available to the Federal Government, the Department of Labor (DOL) may pursue available remedies, including suspension and/or debarment.
- 3. The prospective recipient of Federal assistance funds shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective recipient of Federal assistance funds learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- 4. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "principal," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
- 5. The prospective recipient of Federal assistance funds agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the DOL.
- 6. The prospective recipient of Federal assistance funds further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion Lower Tier Covered Transactions," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- 7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may but is not required to check the <u>List of Parties Excluded from Procurement or Nonprocurement Programs</u>.
- 8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- 9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntary excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the DOL may pursue available remedies, including suspension and/or debarment.

<u>EXHIBIT J</u> ANTI-DISCRIMINATION AGAINST ISRAEL ACT CERTIFICATION

Statutory Requirement: Section 34.600, RSMo, precludes entering into a contract with a company to acquire products and/or services "unless the contract includes a written certification that the company is not currently engaged in and shall not, for the duration of the contract, engage in a boycott of goods or services from the State of Israel; companies doing business in or with Israel or authorized by, licensed by, or organized under the laws of the State of Israel; or persons or entities doing business in the State of Israel."

Exceptions: The statute provides two exceptions for this certification: 1) "contracts with a total potential value of less than one hundred thousand dollars" or 2) "contractors with fewer than ten employees." Therefore the following certification is required prior to any contract award.

Section 34.600, RSMo, defines the following terms:

Company - any for-profit or not-for-profit organization, association, corporation, partnership, joint venture, limited partnership, limited liability partnership, limited liability company, or other entity or business association, including all wholly-owned subsidiaries, majority-owned subsidiaries, parent companies, or affiliates of those entities or business associations.

Boycott Israel and Boycott of the State of Israel - engaging in refusals to deal, terminating business activities, or other actions to discriminate against, inflict economic harm, or otherwise limit commercial relations specifically with the State of Israel; companies doing business in or with Israel or authorized by, licensed by, or organized under the laws of the State of Israel; or persons or entities doing business in the State of Israel, that are all intended to support a boycott of the State of Israel. A company's statement that it is participating in boycotts of the State of Israel; companies doing business in or with Israel or authorized by, licensed by, or organized under the laws of the State of Israel; or persons or entities doing business in the State of Israel, or that it has taken the boycott action at the request, in compliance with, or in furtherance of calls for a boycott of the State of Israel; companies doing business in or with Israel or authorized by, licensed by, or organized under the laws of the State of Israel; or persons or entities doing business in the State of Israel shall be considered to be conclusive evidence that a company is participating in a boycott of the State of Israel; companies doing business in or with Israel or authorized by, licensed by, or organized under the laws of the State of Israel; or persons or entities doing business in the State of Israel; provided, however that a company that has made no such statement may still be considered to be participating in a boycott of the State of Israel; companies doing business in or with Israel or authorized by, licensed by, or organized under the laws of the State of Israel; or persons or entities doing business in the State of Israel if other factors warrant such a conclusion.

Certification: The vendor must therefore certify their current status by completing either Box A, Box B, or Box C on the next page of this Exhibit.

BOX A: To be completed by any vendor that does not meet the definition of "company" above, hereinafter referred to as "Non-Company."

BOX B: To be completed by a vendor that meets the definition of "Company" but has less than ten employees.

BOX C: To be completed by a vendor that meets the definition of "Company" and has ten or more employees.

EXHIBIT J, continued

BOX A – NON-COM	PANY ENTITY
I certify that (Entity Name) company as defined in section 34.600, RSMo, but that it changes during the life of the contract to become a "corentity has ten or more employees, then, prior to the del the entity agrees to comply with, complete, and return I	npany" as defined in section 34.600, RSMo, and the livery of any services and/or supplies as a company,
Authorized Representative's Name (Please Print)	Authorized Representative's Signature
Entity Name	Date
BOX B – COMPANY ENTITY WITH	H LESS THAN TEN EMPLOYEES
I certify that (Company Name section 34.600, RSMo, and currently has less than ter company increases the number of employees to ten or shall comply with, complete, and return Box C to the D	more during the life of the contract, then said company
Authorized Representative's Name (Please Print)	Authorized Representative's Signature
Company Name	Date
I certify that (Company Name section 34.600, RSMo, has ten or more employees, an services from the State of Israel; companies doing busin organized under the laws of the State of Israel; or persidefined in section 34.600, RSMo. I further certify that and/or supplies requested herein said company shall in State of Israel; companies doing business in or with Israte laws of the State of Israel; or persons or entities doing 34.600, RSMo, for the duration of the contract.	MEETS the definition of a company as defined in a dis not currently engaged in a boycott of goods or ness in or with Israel or authorized by, licensed by, or ons or entities doing business in the State of Israel as if the company is awarded a contract for the services of engage in a boycott of goods or services from the rael or authorized by, licensed by, or organized under
Authorized Representative's Name (Please Print)	Authorized Representative's Signature Date

EXHIBIT K

MISCELLANEOUS INFORMATION

Outside United States: If any products and/or services offered under this RFP are being manufactured or performed at sites outside the United States, the vendor MUST disclose such fact and provide details in the space below or on an attached page.

1	The state of the s	
Are any of the vendor's proposed products and/or services being manufactured or performed at sites outside the United States?	Yes	No
If YES, do the proposed products/services satisfy the conditions		
described in section 4, subparagraphs 1, 2, 3, and 4 of Executive Order		
04-09? (see the following web link:	Yes	No
http://s1.sos.mo.gov/CMSImages/Library/Reference/Orders/2004/eo		
04 009.pdf)		
If YES, mark the appropriate exemption below, and provide the reque	sted details:	
1 Unique good or service.		
1 EXPLAIN:		
2Foreign firm hired to market Missouri services/products to a	foreign country.	
2. Identify foreign country:		
3. Economic cost factor exists		
3 EXPLAIN:		
4 Vendor/subcontractor maintains significant business presence	e in the United States	s and only performs
trivial portion of contract work outside US.		
1. Identify maximum percentage of the overall value of the	contract, for any cor	ntract period,
attributed to the value of the products and/or services bei	ng manufactured or	performed at sites
outside the United States:%	,	
Specify what contract work would be performed outside	the United States:	
2. Speens made contrast to the transfer of persons		-

Employee/Conflict of Interest:

Vendors who are elected or appointed officials or employees of the State of Missouri or any political subdivision thereof, serving in an executive or administrative capacity, must comply with sections 105.450 to 105.458, RSMo, regarding conflict of interest. If the vendor or any owner of the vendor's organization is currently an elected or appointed official or an employee of the State of Missouri or any political subdivision thereof, please provide the following information:		
Name and title of elected or appointed official or employee of the State of Missouri or any political		
subdivision thereof:		
If employee of the State of Missouri or political		
subdivision thereof, provide name of state agency or		
political subdivision where employed:		
Percentage of ownership interest in vendor's		
organization held by elected or appointed official or	%	
employee of the State of Missouri or political		
subdivision thereof:		

Registration of Business Name (if applicable) with the Missouri Secretary of State: The vendor should indicate the vendor's charter number and company name with the Missouri Secretary of State. Additionally, the vendor should

provide proof of the vendor's good standing status with the Missouri Secretary of State. If the vendor is exempt from registering with the Missouri Secretary of State pursuant to section 351.572, RSMo., identify the specific section of 351.572 RSMo., which supports the exemption.

Charter Number (if applicable)	Company Name
If exempt from registering with the Missouri Section of 351.572 to support the exemption:	retary of State pursuant to section 351.572 RSMo., identify the

<u>Proposed Subcontractors</u> - The vendor should identify any subcontractor(s) proposed to provide any of the services required herein.

Proposed Subcontractor Name and Address	Service Proposed to be Provided by the Proposed Subcontractor

<u>ATTACHMENT 1</u> <u>EVALUATION CRITERIA FOR TECHNICAL PROPOSAL</u>

As explained in Section 4.6, proposals will be evaluated using the weighting of factors found in that section.

Scoring of Proposed Methodology, Approach, and Work Plan

The state will assess the Proposed Methodology, Approach, and Work Plan based upon the adjectival categories in Table 1.

	TABLE 1
Rating	Definition
Distinctive	Proposal exceeds the requirements in a way that promises significant benefits to the government; proposal presents innovative, and/or best-in-class solutions; high confidence in the proposed approach
Superior	Proposals meets all requirements; proposal offers some benefits beyond the stated requirements; no material weaknesses; high confidence in the proposed approach
Satisfactory	Proposal meets all requirements; proposal offers no significant benefits beyond the stated requirements; no significant weaknesses exist; reasonable confidence in the proposed approach
Marginal	Proposal has one or more significant weaknesses and proposal provides limited details; significant weaknesses are correctable without major revisions to the proposal; moderate confidence in the proposed approach
Unsatisfactory	Proposal has several significant weaknesses and proposal lacks detail and/or clarity, for which correction would require major revisions or redirection of the proposal and/or proposal solution; little or no confidence in the proposed approach

The adjectival rating for the specific elements of the Proposed Methodology, Approach, and Work Plan will have the point values as shown in Table 2:

TABLE 2					
1. 1.00	Distinctive	Superior	Satisfactory	Marginal	Unsatisfactory
Analysis	55	43	28	8	0
Methods for					
Final					
Deliverable					10
Data Sources	20	16	10	5	0
to be Utilized		,			
for Final					
Deliverable					
Timeline for	15	12	7	3	0
Milestone #1					

Scoring of Team Qualifications

The state will assess the Team Qualifications based upon the adjectival categories in Table 3.

Wed-1	TABLE 3					
Rating	Definition					
Distinctive	Team exceeds the requirements with superlative experience, qualifications, and/or expertise in a way that promises significant benefits to the government; team has track record of delivering significant impact in complex and demanding situations, and/or recognized as leaders or emerging leaders among relevant peer groups; high confidence with the team's qualifications					
Superior	Team meets all requirements and offers experience, qualifications, and demonstrated expertise that goes beyond stated requirements; no material weaknesses; confidence with the team's qualifications					
Satisfactory	Team meets all requirements; offers no significant benefits beyond the stated requirements; no significant weaknesses exist; reasonable confidence with the team's qualifications					
Marginal	Team has one or more significant weaknesses; significant weaknesses are manageable; moderate confidence with the team's qualifications					
Unsatisfactory	Team has several significant weaknesses; which present significant risks to project delivery; little or no confidence with the team's qualifications					

The adjectival rating for Leadership Team and Working Team will have a point value as shown in Table 4:

TABLE 4						
	Distinctive	Superior	Satisfactory	Marginal	Unsatisfactory	
Leadership	15	12	7	3	0	
team				-	10	
Working team	15	12	<u> </u>	3		

Scoring of Past Performance

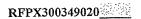
The state will assess the Vendor's Past Performance based upon the adjectival categories in Table 5:

	TABLE 5
	CASE STUDY/REFERENCE
Rating	Definition
Distinctive	Past performance was recent and involved essentially the same scope and magnitude of effort and complexities required in this RFP. Reference indicated past performance significantly exceeded overall requirements and expectations; delivered significant and/or innovative impact.
Superior	Past performance was recent involved similar scope and magnitude of effort and complexities required in the RFP. Reference indicated past performance exceeded requirements on some dimensions.
Satisfactory	Past performance was relatively recent and involved some of the scope and magnitude of effort and complexities required in the RFP. Reference indicated past performance met minimum requirements.
Marginal	Past performance met requirements, but only after significant extra effort significant delay, significant scope revisions were found necessary, and/or other adverse factors.
Unsatisfactory	Past performance is not relevant to the requirements in the RFP, or resulted ir failed project/work due to mainly to the fault of the vendor.

The adjectival rating for each Past Performance Reference Case Study will have a point value as shown in Table 6:

	TABLE 6						
	Distinctive	Superior	Satisfactory	Marginal	Unsatisfactory		
Overall	10	8	5	2	0		
Relevant							
Experience							
Case study #1	10	8	5	2	0		
Case study #2	10	8	5	2	0		

NOTE: In the event the vendor fails to respond to any of the evaluation elements identified in Evaluation and Award Process Section, the vendor may receive an "Unsatisfactory" rating for the corresponding evaluation element.



STATE OF MISSOURI DIVISION OF PURCHASING TERMS AND CONDITIONS -- REQUEST FOR PROPOSAL

1. TERMINOLOGY/DEFINITIONS

Whenever the following words and expressions appear in a Request for Proposal (RFP) document or any addendum thereto, the definition or meaning described below shall apply.

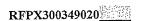
- Agency and/or State Agency means the statutory unit of state government in the State of Missouri for which the equipment, supplies, and/or services are being purchased by the Division of Purchasing (Purchasing). The agency is also responsible for payment.
- Addendum means a written, official modification to an RFP.
- Amendment means a written, official modification to a contract.
- Attachment applies to all forms which are included with an RFP to incorporate any informational data or requirements related to the performance d. requirements and/or specifications.
- Proposal End Date and Time and similar expressions mean the exact deadline required by the RFP for the receipt of sealed proposals.
- Vendor means the supplier, offeror, person, or organization that responds to an RFP by submitting a proposal with prices to provide the equipment, supplies, and/or services as required in the RFP document.
- Buyer means the procurement staff member of Purchasing. The Contact Person as referenced herein is usually the Buyer.
- Contract means a legal and binding agreement between two or more competent parties, for a consideration for the procurement of equipment, supplies, and/or services.
- Contractor means a supplier, offeror, person, or organization who is a successful vendor as a result of an RFP and who enters into a contract.
- Exhibit applies to forms which are included with an RFP for the vendor to complete and submit with the sealed proposal prior to the specified end date j.
- Request for Proposal (RFP) means the solicitation document issued by Purchasing to potential vendors for the purchase of equipment, supplies, and/or services as described in the document. The definition includes these Terms and Conditions as well as all Pricing Pages, Exhibits, Attachments, and
- May means that a certain feature, component, or action is permissible, but not required.
- m. Must means that a certain feature, component, or action is a mandatory condition.
- Pricing Page(s) applies to the form(s) on which the vendor must state the price(s) applicable for the equipment, supplies, and/or services required in the RFP. The pricing pages must be completed and submitted by the vendor with the sealed proposal prior to the specified proposal end date and time.
- RSMo (Revised Statutes of Missouri) refers to the body of laws enacted by the Legislature which govern the operations of all agencies of the State of Missouri. Chapter 34 of the statutes is the primary chapter governing the operations of Purchasing.
- Shall has the same meaning as the word must. p.
- Should means that a certain feature, component and/or action is desirable but not mandatory.

2. APPLICABLE LAWS AND REGULATIONS

- The contract shall be construed according to the laws of the State of Missouri. The contractor shall comply with all local, state, and federal laws and regulations related to the performance of the contract to the extent that the same may be applicable.
- To the extent that a provision of the contract is contrary to the Constitution or laws of the State of Missouri or of the United States, the provisions shall be void and unenforceable. However, the balance of the contract shall remain in force between the parties unless terminated by consent of both the contractor and Purchasing.
- The contractor must be registered and maintain good standing with the Secretary of State of the State of Missouri and other regulatory agencies, as may be required by law or regulations.
- The contractor must timely file and pay all Missouri sales, withholding, corporate and any other required Missouri tax returns and taxes, including interest and additions to tax.
- The exclusive venue for any legal proceeding relating to or arising out of the RFP or resulting contract shall be in the Circuit Court of Cole County,
- The contractor shall only employ personnel authorized to work in the United States in accordance with applicable federal and state laws and Executive Order 07-13 for work performed in the United States.

3. OPEN COMPETITION/REQUEST FOR PROPOSAL DOCUMENT

- a. It shall be the vendor's responsibility to ask questions, request changes or clarification, or otherwise advise Purchasing if any language, specifications or requirements of an RFP appear to be ambiguous, contradictory, and/or arbitrary, or appear to inadvertently restrict or limit the requirements stated in the RFP to a single source. Any and all communication from vendors regarding specifications, requirements, competitive proposal process, etc., must be directed to the buyer from Purchasing, unless the RFP specifically refers the vendor to another contact. Such e-mail, fax, or phone communication should be received at least ten calendar days prior to the official proposal end date.
- b. Every attempt shall be made to ensure that the vendor receives an adequate and prompt response. However, in order to maintain a fair and equitable procurement process, all vendors will be advised, via the issuance of an addendum to the RFP, of any relevant or pertinent information related to the procurement. Therefore, vendors are advised that unless specified elsewhere in the RFP, any questions received less than ten calendar days prior to the RFP end date may not be answered.
- Vendors are cautioned that the only official position of the State of Missouri is that which is issued by Purchasing in the RFP or an addendum thereto. No other means of communication, whether oral or written, shall be construed as a formal or official response or statement.
- Purchasing monitors all procurement activities to detect any possibility of deliberate restraint of competition, collusion among vendors, price-fixing by vendors, or any other anticompetitive conduct by vendors which appears to violate state and federal antitrust laws. Any suspected violation shall be referred to the Missouri Attorney General's Office for appropriate action,
- The RFP is available for viewing and downloading on the MissouriBUYS Statewide eProcurement System. Registered vendors are electronically notified of those proposal opportunities that match the commodity codes for which the vendor registered in MissouriBUYS. If a registered vendor's e-mail address is incorrect, the vendor must update the e-mail address themselves on the state's MissouriBUYS Statewide eProcurement System at https://missouribuys.mo.gov/.
- Purchasing reserves the right to officially amend or cancel an RFP after issuance. It shall be the sole responsibility of the vendor to monitor the MissouriBUYS Statewide eProcurement System to obtain a copy of the addendum(s). Registered vendors who received e-mail notification of the proposal opportunity when the RFP was established and registered vendors who have responded to the RFP on-line prior to an addendum being issued should receive e-mail notification of the addendum(s). Registered vendors who received e-mail notification of the proposal opportunity when the RFP was



established and registered vendors who have responded to the proposal on-line prior to a cancellation being issued should receive e-mail notification of a cancellation issued prior to the exact end date and time specified in the RFP.

4. PREPARATION OF PROPOSALS

a. Vendors must examine the entire RFP carefully. Failure to do so shall be at the vendor's risk.

b. Unless otherwise specifically stated in the RFP, all specifications and requirements constitute minimum requirements. All proposals must meet or exceed the stated specifications and requirements.

c. Unless otherwise specifically stated in the RFP, any manufacturer names, trade names, brand names, information and/or catalog numbers listed in a specification and/or requirement are for informational purposes only and are not intended to limit competition. The vendor may offer any brand which meets or exceeds the specification for any item, but must state the manufacturer's name and model number for any such brands in the proposal. In addition, the vendor shall explain, in detail, (1) the reasons why the proposed equivalent meets or exceeds the specifications and/or requirements and (2) why the proposed equivalent should not be considered an exception thereto. Proposals which do not comply with the requirements and specifications are subject to rejection without clarification.

d. Proposals lacking any indication of intent to offer an alternate brand or to take an exception shall be received and considered in complete compliance with the specifications and requirements as listed in the RFP.

e. In the event that the vendor is an agency of state government or other such political subdivision which is prohibited by law or court decision from complying with certain provisions of an RFP, such a vendor may submit a proposal which contains a list of statutory limitations and identification of those prohibitive clauses. The vendor should include a complete list of statutory references and citations for each provision of the RFP, which is affected by this paragraph. The statutory limitations and prohibitive clauses may (1) be requested to be clarified in writing by Purchasing or (2) be accepted without further clarification if the statutory limitations and prohibitive clauses are deemed acceptable by Purchasing. If Purchasing determines clarification of the statutory limitations and prohibitive clauses is necessary, the clarification will be conducted in order to agree to language that reflects the intent and compliance of such law and/or court order and the RFP.

f. All equipment and supplies offered in a proposal must be new, of current production, and available for marketing by the manufacturer unless the RFP clearly specifies that used, reconditioned, or remanufactured equipment and supplies may be offered.

g. Prices shall include all packing, handling and shipping charges FOB destination, freight prepaid and allowed unless otherwise specified in the RFP.

h. Proposals, including all prices therein, shall remain valid for 90 days from proposal opening or Best and Final Offer (BAFO) submission unless otherwise indicated. If the proposal is accepted, the entire proposal, including all prices, shall be firm for the specified contract period.

i. Any foreign vendor not having an Employer Identification Number assigned by the United States Internal Revenue Service (IRS) must submit a completed IRS Form W-8 prior to or with the submission of their proposal in order to be considered for award.

5. SUBMISSION OF PROPOSALS

- a. Registered vendors may submit proposals electronically through the MissouriBUYS Statewide eProcurement System at https://missouribuys.mo.gov/ or by delivery of a hard copy to the Purchasing office. Vendors that have not registered on the MissouriBUYS Statewide eProcurement System may submit proposals hard copy delivered to the Purchasing office. Delivered proposals must be sealed in an envelope or container, and received in the Purchasing office located at 301 West High St, Rm 630 in Jefferson City, MO no later than the exact end date and time specified in the RFP. All proposals must (1) be submitted by a duly authorized representative of the vendor's organization, (2) contain all information required by the RFP, and (3) be priced as required. Hard copy proposals may be mailed to the Purchasing post office box address. However, it shall be the responsibility of the vendor to ensure their proposal is in the Purchasing office (address listed above) no later than the exact end date and time specified in the RFP.
- b. The sealed envelope or containing a proposal should be clearly marked on the outside with (1) the official RFP number and (2) the official end date and time. Different proposals should not be placed in the same envelope, although copies of the same proposal may be placed in the same envelope.
- c. A proposal submitted electronically by a registered vendor may be modified on-line prior to the official end date and time. A proposal which has been delivered to the Purchasing office may be modified by signed, written notice which has been received by Purchasing prior to the official end date and time specified. A proposal may also be modified in person by the vendor or its authorized representative, provided proper identification is presented before the official end date and time. Telephone or telegraphic requests to modify a proposal shall not be honored.
- d. A proposal submitted electronically by a registered vendor may be retracted on-line prior to the official end date and time. A proposal which has been delivered to the Purchasing may only be withdrawn by a signed, written document on company letterhead transmitted via mail, e-mail, or facsimile which has been received by Purchasing prior to the official end and time specified. A proposal may also be withdrawn in person by the vendor or its authorized representative, provided proper identification is presented before the official end date and time. Telephone or telegraphic requests to withdraw a proposal shall not be honored.
- e. A proposal may also be withdrawn after the proposal opening through submission of a written request by an authorized representative of the vendor.

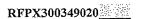
 Justification of withdrawal decision may include a significant error or exposure of proposal information that may cause irreparable harm to the vendor.
- f. When submitting a proposal electronically, the registered vendor indicates acceptance of all RFP requirements, terms and conditions by clicking on the "Accept" button on the Overview tab. Vendors delivering a hard copy proposal to Purchasing must sign and return the RFP cover page or, if applicable, the cover page of the last addendum thereto in order to constitute acceptance by the vendor of all RFP requirements, terms and conditions. Failure to do so may result in rejection of the proposal unless the vendor's full compliance with those documents is indicated elsewhere within the vendor's response.
- g. Faxed proposals shall not be accepted. However, faxed and e-mail no-bid notifications shall be accepted.

6. PROPOSAL OPENING

- a. Proposal openings are public on the end date and at the opening time specified on the RFP document. Only the names of the respondents shall be read at the proposal opening. All vendors may view the same proposal response information on the MissouriBUYS Statewide eProcurement System. The contents of the responses shall not be disclosed at this time.
- b. Proposals which are not received in the Purchasing office prior to the official end date and time shall be considered late, regardless of the degree of lateness, and normally will not be opened. Late proposals may only be opened under extraordinary circumstances in accordance with 1 CSR 40-1.050.

7. PREFERENCES

- a. In the evaluation of proposals, preferences shall be applied in accordance with chapter 34, RSMo, other applicable Missouri statutes, and applicable Executive Orders. Contractors should apply the same preferences in selecting subcontractors.
- b. By virtue of statutory authority, a preference will be given to materials, products, supplies, provisions and all other articles produced, manufactured, mined, processed or grown within the State of Missouri and to all firms, corporations or individuals doing business as Missouri firms, corporations or individuals. Such preference shall be given when quality is equal or better and delivered price is the same or less.



In accordance with Executive Order 05-30, contractors are encouraged to utilize certified minority and women-owned businesses in selecting subcontractors.

8. EVALUATION/AWARD

- a. Any clerical error, apparent on its face, may be corrected by the buyer before contract award. Upon discovering an apparent clerical error, the buyer shall contact the vendor and request clarification of the intended proposal. The correction shall be incorporated in the notice of award. Examples of apparent clerical errors are: 1) misplacement of a decimal point; and 2) obvious mistake in designation of unit.
- Any pricing information submitted by a vendor shall be subject to evaluation if deemed by Purchasing to be in the best interest of the State of Missouri.
- The vendor is encouraged to propose price discounts for prompt payment or propose other price discounts that would benefit the State of Missouri. However, unless otherwise specified in the RFP, pricing shall be evaluated at the maximum potential financial liability to the State of Missouri.
- Awards shall be made to the vendor whose proposal (1) complies with all mandatory specifications and requirements of the RFP and (2) is the lowest and best proposal, considering price, responsibility of the vendor, and all other evaluation criteria specified in the RFP and any subsequent negotiations and (3) complies with chapter 34, RSMo, other applicable Missouri statutes, and all applicable Executive Orders.
- In the event all vendors fail to meet the same mandatory requirement in an RFP, Purchasing reserves the right, at its sole discretion, to waive that requirement for all vendors and to proceed with the evaluation. In addition, Purchasing reserves the right to waive any minor irregularity or technicality found in any individual proposal.
- Purchasing reserves the right to reject any and all proposals.
- When evaluating a proposal, the State of Missouri reserves the right to consider relevant information and fact, whether gained from a proposal, from a vendor, from vendor's references, or from any other source.
- Any information submitted with the proposal, regardless of the format or placement of such information, may be considered in making decisions related to the responsiveness and merit of a proposal and the award of a contract.
- Negotiations may be conducted with those vendors who submit potentially acceptable proposals. Proposal revisions may be permitted for the purpose of obtaining best and final offers. In conducting negotiations, there shall be no disclosure of any information submitted by competing vendors.
- Any award of a contract shall be made by notification from Purchasing to the successful vendor. Purchasing reserves the right to make awards by item, group of items, or an all or none basis. The grouping of items awarded shall be determined by Purchasing based upon factors such as item similarity, location, administrative efficiency, or other considerations in the best interest of the State of Missouri.
- k. Pursuant to section 610.021, RSMo, proposals and related documents shall not be available for public review until after a contract is executed or all
- Purchasing posts all proposal results on the MissouriBUYS Statewide eProcurement System for all vendors to view for a reasonable period after proposal award and maintains images of all proposal file material for review. Vendors who include an e-mail address with their proposal will be notified of the
- m. Purchasing reserves the right to request clarification of any portion of the vendor's response in order to verify the intent of the vendor. The vendor is cautioned, however, that its response may be subject to acceptance or rejection without further clarification,
- Any proposal award protest must be received within ten (10) business days after the date of award in accordance with the requirements of 1 CSR 40-1.050.
- The final determination of contract(s) award shall be made by Purchasing.

9. CONTRACT/PURCHASE ORDER

- a. By submitting a proposal, the vendor agrees to furnish any and all equipment, supplies and/or services specified in the RFP, at the prices quoted, pursuant to all requirements and specifications contained therein.
- A binding contract shall consist of: (1) the RFP, addendums thereto, and any Best and Final Offer (BAFO) request(s) with RFP changes/additions, (2) the contractor's proposal including any contractor BAFO response(s), (3) clarification of the proposal, if any, and (4) Purchasing's acceptance of the proposal by "notice of award" or by "purchase order." All Exhibits and Attachments included in the RFP shall be incorporated into the contract by reference.
- c. A notice of award issued by the State of Missouri does not constitute an authorization for shipment of equipment or supplies or a directive to proceed with services. Before providing equipment, supplies and/or services for the State of Missouri, the contractor must receive a properly authorized purchase order or other form of authorization given to the contractor at the discretion of the state agency.
- The contract expresses the complete agreement of the parties and performance shall be governed solely by the specifications and requirements contained therein. Any change to the contract, whether by modification and/or supplementation, must be accomplished by a formal contract amendment signed and approved by and between the duly authorized representative of the contractor and Purchasing or by a modified purchase order prior to the effective date of such modification. The contractor expressly and explicitly understands and agrees that no other method and/or no other document, including correspondence, acts, and oral communications by or from any person, shall be used or construed as an amendment or modification to the contract.

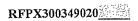
10. INVOICING AND PAYMENT

- The State of Missouri does not pay state or federal taxes unless otherwise required under law or regulation.
- The statewide financial management system has been designed to capture certain receipt and payment information. For each purchase order received, an invoice must be submitted that references the purchase order number and must be itemized in accordance with items listed on the purchase order. Failure to comply with this requirement may delay processing of invoices for payment.
- The contractor shall not transfer any interest in the contract, whether by assignment or otherwise, without the prior written consent of Purchasing.
- d. Payment for all equipment, supplies, and/or services required herein shall be made in arrears unless otherwise indicated in the RFP.
- The State of Missouri assumes no obligation for equipment, supplies, and/or services shipped or provided in excess of the quantity ordered. Any unauthorized quantity is subject to the state's rejection and shall be returned at the contractor's expense.
- All invoices for equipment, supplies, and/or services purchased by the State of Missouri shall be subject to late payment charges as provided in section 34.055, RSMo.
- The State of Missouri reserves the right to purchase goods and services using the state purchasing card.

11. DELIVERY

Time is of the essence. Deliveries of equipment, supplies, and/or services must be made no later than the time stated in the contract or within a reasonable period of time, if a specific time is not stated.

12. INSPECTION AND ACCEPTANCE



a. No equipment, supplies, and/or services received by an agency of the state pursuant to a contract shall be deemed accepted until the agency has had reasonable opportunity to inspect said equipment, supplies, and/or services.

b. All equipment, supplies, and/or services which do not comply with the specifications and/or requirements or which are otherwise unacceptable or defective may be rejected. In addition, all equipment, supplies, and/or services which are discovered to be defective or which do not conform to any warranty of the contractor upon inspection (or at any later time if the defects contained were not reasonably ascertainable upon the initial inspection) may be rejected.

c. The State of Missouri reserves the right to return any such rejected shipment at the contractor's expense for full credit or replacement and to specify a reasonable date by which replacements must be received.

d. The State of Missouri's right to reject any unacceptable equipment, supplies, and/or services shall not exclude any other legal, equitable or contractual remedies the state may have.

13. WARRANTY

a. The contractor expressly warrants that all equipment, supplies, and/or services provided shall: (1) conform to each and every specification, drawing, sample or other description which was furnished to or adopted by Purchasing, (2) be fit and sufficient for the purpose expressed in the RFP, (3) be merchantable, (4) be of good materials and workmanship, and (5) be free from defect.

b. Such warranty shall survive delivery and shall not be deemed waived either by reason of the state's acceptance of or payment for said equipment, supplies, and/or services.

14. CONFLICT OF INTEREST

a. Elected or appointed officials or employees of the State of Missouri or any political subdivision thereof, serving in an executive or administrative capacity, must comply with sections 105.452 and 105.454, RSMo, regarding conflict of interest.

b. The contractor hereby covenants that at the time of the submission of the proposal the contractor has no other contractual relationships which would create any actual or perceived conflict of interest. The contractor further agrees that during the term of the contract neither the contractor nor any of its employees shall acquire any other contractual relationships which create such a conflict.

15. REMEDIES AND RIGHTS

a. No provision in the contract shall be construed, expressly or implied, as a waiver by the State of Missouri of any existing or future right and/or remedy available by law in the event of any claim by the State of Missouri of the contractor's default or breach of contract.

b. The contractor agrees and understands that the contract shall constitute an assignment by the contractor to the State of Missouri of all rights, title and interest in and to all causes of action that the contractor may have under the antitrust laws of the United States or the State of Missouri for which causes of action have accrued or will accrue as the result of or in relation to the particular equipment, supplies, and/or services purchased or procured by the contractor in the fulfillment of the contract with the State of Missouri.

16. CANCELLATION OF CONTRACT

a. In the event of material breach of the contractual obligations by the contractor, Purchasing may cancel the contract. At its sole discretion, Purchasing may give the contractor an opportunity to cure the breach or to explain how the breach will be cured. The actual cure must be completed within no more than 10 working days from notification, or at a minimum the contractor must provide Purchasing within 10 working days from notification a written plan detailing how the contractor intends to cure the breach.

b. If the contractor fails to cure the breach or if circumstances demand immediate action, Purchasing will issue a notice of cancellation terminating the contract immediately. If it is determined Purchasing improperly cancelled the contract, such cancellation shall be deemed a termination for convenience in accordance with the contract.

c. If Purchasing cancels the contract for breach, Purchasing reserves the right to obtain the equipment, supplies, and/or services to be provided pursuant to the contract from other sources and upon such terms and in such manner as Purchasing deems appropriate and charge the contractor for any additional costs incurred thereby.

d. The contractor understands and agrees that funds required to fund the contract must be appropriated by the General Assembly of the State of Missouri for each fiscal year included within the contract period. The contract shall not be binding upon the state for any period in which funds have not been appropriated, and the state shall not be liable for any costs associated with termination caused by lack of appropriations.

17. COMMUNICATIONS AND NOTICES

Any notice to the vendor/contractor shall be deemed sufficient when deposited in the United States mail postage prepaid, transmitted by facsimile, transmitted by e-mail or hand-carried and presented to an authorized employee of the vendor/contractor.

18. BANKRUPTCY OR INSOLVENCY

a. Upon filing for any bankruptcy or insolvency proceeding by or against the contractor, whether voluntary or involuntary, or upon the appointment of a receiver, trustee, or assignee for the benefit of creditors, the contractor must notify Purchasing immediately.

b. Upon learning of any such actions, Purchasing reserves the right, at its sole discretion, to either cancel the contract or affirm the contract and hold the contractor responsible for damages.

19. INVENTIONS, PATENTS AND COPYRIGHTS

The contractor shall defend, protect, and hold harmless the State of Missouri, its officers, agents, and employees against all suits of law or in equity resulting from patent and copyright infringement concerning the contractor's performance or products produced under the terms of the contract.

20. NON-DISCRIMINATION AND AFFIRMATIVE ACTION

In connection with the furnishing of equipment, supplies, and/or services under the contract, the contractor and all subcontractors shall agree not to discriminate against recipients of services or employees or applicants for employment on the basis of race, color, religion, national origin, sex, age, disability, or veteran status unless otherwise provided by law. If the contractor or subcontractor employs at least 50 persons, they shall have and maintain an affirmative action program which shall include:

- A written policy statement committing the organization to affirmative action and assigning management responsibilities and procedures for evaluation and
- The identification of a person designated to handle affirmative action;
- The establishment of non-discriminatory selection standards, objective measures to analyze recruitment, an upward mobility system, a wage and salary structure, and standards applicable to layoff, recall, discharge, demotion, and discipline;
- The exclusion of discrimination from all collective bargaining agreements; and
- Performance of an internal audit of the reporting system to monitor execution and to provide for future planning.

If discrimination by a contractor is found to exist, Purchasing shall take appropriate enforcement action which may include, but not necessarily be limited to, cancellation of the contract, suspension, or debarment by Purchasing until corrective action by the contractor is made and ensured, and referral to the Attorney General's Office, whichever enforcement action may be deemed most appropriate.

21. AMERICANS WITH DISABILITIES ACT

In connection with the furnishing of equipment, supplies, and/or services under the contract, the contractor and all subcontractors shall comply with all applicable requirements and provisions of the Americans with Disabilities Act (ADA).

22. FILING AND PAYMENT OF TAXES

The commissioner of administration and other agencies to which the state purchasing law applies shall not contract for goods or services with a vendor if the vendor or an affiliate of the vendor makes sales at retail of tangible personal property or for the purpose of storage, use, or consumption in this state but fails to collect and properly pay the tax as provided in chapter 144, RSMo. For the purposes of this section, "affiliate of the vendor" shall mean any person or entity that is controlled by or is under common control with the vendor, whether through stock ownership or otherwise. Therefore the vendor's failure to maintain compliance with chapter 144, RSMo, may eliminate their proposal from consideration for award.

23. TITLES

Titles of paragraphs used herein are for the purpose of facilitating reference only and shall not be construed to infer a contractual construction of language.

Revised 06-27-19



Electric Portfolio Historical Overview

Presentation to the Task Force on Distributed Energy Resources and Net Metering June 15, 2023

Missouri Public Utility Alliance (MPUA)

Mike Siefert, Director, Generating Assets | msiefert@mpua.org Elizabeth Smith, Manager, Advocacy & Regulatory Analysis | esmith@mpua.org

History

- Over 2000 Municipal and Local Utilities
- Butler, Missouri is the oldest electric utility West of the Mississippi River
- City owned power generation is now auxiliary or peak back-up.
- Joint Action Agencies formed to share power resources.

MPUA and Power Pools

- MPUA is the parent organization for the Missouri Electric Commission (MEC)
- MEC holds 3 power pools.
- Scheduling for sufficient and economical power supply

Municipal Power and Local Control

- Regulated by city councils and local utility boards.
- Local officials make decisions on services and rates.
- Cost based no shareholders.
- Highly responsive
- All revenue and pay stays in the local economy.
- Job creation

Renewables and Power Supply

- MPUA currently predominantly using fossil fuel.
- Actively engaged in use of renewable energy
- Ownership of several solar farms
- Member cities engaged in renewable energy.

Aspirational Goals for the Task Force

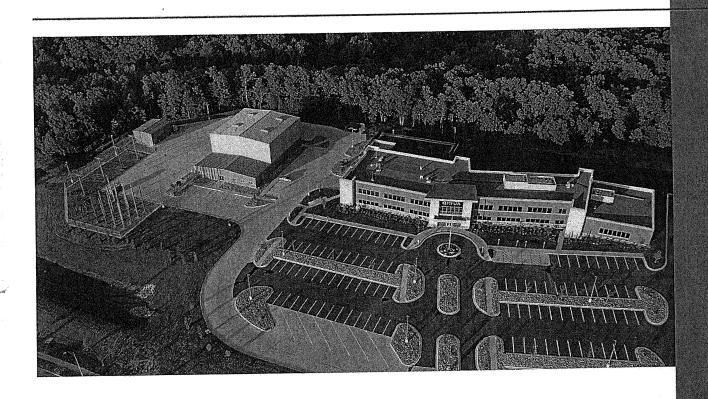
- Consumer protection
- Safety
- Balancing resources and interests
- Reliable, stable, affordable power

Consider MPUA a partner in creating solutions!



Annual Report

2022



Full Report can be found at: https://cdn.ymaws.com/mpua.org/resource/resmgr/2022_annual_report.pdf

Good Afternoon Chairman and committee members. Thank you for your time today. Myself and the small businesses that I represent today appreciate the task in front of you and appreciate you taking the time to hear from us.

A little about me, I was born and raised in Raytown, Missouri. Neither of my parents had a college education but they worked hard to give my sister, brother and me that opportunity. I attended the University of Missouri in Rolla where I got my degree in Nuclear Engineering. Upon graduating I served 7 years as a Nuclear Trained Officer in the United States Navy and served aboard the Aircraft Carrier the USS Abraham Lincoln. Since leaving the Navy I have spent the last 20 plus years in commercial construction management positions including the last 12 years as the owner of Artisun Solar.

Artisun Solar works with small to medium sized businesses and farmers across the Midwest to help them reduce their energy costs by transitioning from traditional power sources to using solar power. We have installed over 500 Solar PV Systems totaling over 37MW of solar power throughout the Midwest since 2011. Our typical customer has anywhere from 10 to 75 employees with revenues ranging from \$10M to a few hundred million dollars. Most of the businesses we work with are privately or closely held companies with the owners living in the local community.

The reason I am before you today is to ask you to expand access to distributed generation for the small businesses in your state. As I've stated we work with small businesses to help them reduce their energy costs, Energy costs that are rising rapidly and they have very few options to control. I know a lot of people think that you install solar panels to "Save the planet", but in the 10 plus years that I have been working in solar I can count on I hand how many people ever mentioned that as a potential reason. None of our customers would ever install solar without a strong financial case for it. These are business men and women who do not have the time or resources to waste on anything that does not strengthen their company.

That being said, lets address the reason why we are here today. Utilities who have a monopoly on the market are saying that solar customers are not paying their "Fair Share". Let us all be honest here, the real reason they want to get ahead of this is that they have outdated billing methods that they don't want to change and they see solar as a threat to their revenue. As any business owner will tell you loss of revenue is not the same as reduced profitability.

First of all I do want to say 90% of the utilities in the state are great to work with, however, all of these utilities have every tool they need to properly account for and bill for electrical customer usage. Utilities have the ability to charge all customers equally for being connected to the grid, transmission or demand fees, and supply/KWh fees accordingly. I know that they will say that solar is being cross-subsidized by other customers. But what they don't tell you is that their current billing system already subsidizes customers with different energy use profiles. 2 Companies or home owners right next door to each other that

Artisun Solar

Artisun Solar, LLC. 5750 w 95th Street, Suite 340, Overland Park, KS 66207 TEL 816.265, 1786 FAX 816.298, 1359

2nd point: Interconnection processes and the power of small municipal utilities have to prevent anything above current statute to protect small business interests. I'll try to make this quick but I have 2 customers who both are on City Municipal utilities. These city Utilities managers are typically the highest paid, longest tenure, and most influential city employee and also the managers of the least regulated utilities in the state with budgets 2 or 3 times that of the city in most cases. We have had one contract for over a year in one city trying to get just a fair interconnection for the customer. At first the city utility wanted to do a study that could cost over \$50,000, add interrupting devices that would cost over \$50,000 and they are insisting that the customer cannot use ANY of the energy for their own use. They must sell all of the energy to the utility, at 3 c a KWH and then the city will sell the energy back to

them at 9c per kwh. A 200 percent markup for a service that they did not even provide. Same situation with another city utility and the customer is losing out on a \$352,000 grant for solar and energy efficiency projects if they cannot resolve this. That's just insane. This is taking away access to Missouri businesses and farmers from DOE & USDA grants/funding that is going to other states. You would think given all of this opposition to these projects that solar doesn't make sense, right? Yet, 12 out of 18 of MEC's Owned Generation and Long term contracts (Attachment 4) are with solar farms and 1 of their gold sponsors at their annual convention is a Solar Company. Additionally, just this year on August 17th, 2023 MPUA purchased a 3.2MW Solar Farm for a total of 46MW DC. So is it really solar they are against? Or are they just against their customers taking them out of the loop? MPUA & MEI has a website to help members obtain similar funding (References 2 & 3) to those that they are keeping private investment from getting. Why are they standing in the way of private companies investing into the grid?

This situation has put the city council in an awkward and uncomfortable situation that they do not want to be in. They are stuck between making a decision on something that they do not have the expertise at that pits a highly influential city employee against an out of state business who employees over 65 employees and is now considering axing a \$15M expansion project in the state. You can prevent this by expanding net metering and distributed generation access and giving customers back their right to generate their own electricity.

In conclusion, these companies are not installing solar to save the planet 1 solar panel at a time. They are trying to grow their business, they are reinvesting their savings into their business. As a small business owner, I take my employees job security as my number 1 priority. I never want to let an employee go and would hate it if I had to because of financial uncertainty. And I can tell you most of these small business owners have the same heart. I ask you, don't take away a method for them to prevent this. I ask you to stand up against these Monopolies and give Missouri consumers a choice. If Ameren's own rates do not convince you to raise net metering limits then I ask that you complete a comprehensive DEG study of ALL the utilities rates and costs and see the facts for yourself. Then, issue a report recommending a better interconnection process and allow small businesses in the state to connect by raising the DEG Net metering limit to 1MW with an Annual True Up for up to 10% of the utilities capacity.

Artisun Solar

Artisun Solar, LLC. $5750 \text{ w} 95^{\text{th}}$ Street, Suite 340, Overland Park, KS 66207 TEL 816.265.1786 FAX 816.298.1359

Attachments

- 1. Ameren 3M Large General Service Rate
- 2. Ameren Electric Power Purchases From Qualifying Facilities Rates
- 3. MAP of MEC Power Generation Projects
- 4. Testimonials from the following local businesses:
 - Boulevard Brewing Company
 - MOCAP
 - VHC Brands
 - Seyer Industries
 - SPS
 - Hy-C Company
 - Champion Precast
 - Balderston Auto Group
 - BWP-NS!
 - PBA Health
 - U.S. Toy Company
 - Ice Cream Factory
 - Vernon Graphic Solutions
 - Woodruff Hardware Store

References

- 1. Missouri Energy Initiative "Net Metering in Missouri: The Benefits & The Costs" Winter 2015.
- 2. https://mpua.org/page/fundingopportunities
- 3. https://www.moenergy.org/copy-of-resources

UNION ELECTRIC COMPANY ELECTRIC SERVICE			
MO.P.S.C. SCHEDULE NO. 6 6th	Revised	SHEET NO	56
CANCELLING MO.P.S.C. SCHEDULE NO. 6 5th	Revised	SHEET NO	56
APPLYING TO MISSOURI SERVICE AREA			-
	The second secon		
SERVICE CLASSIFICATION NO. 3 (M)			
LARGE GENERAL SERVICE RATE			
*RATE BASED ON MONTHLY METER READINGS			
Summer Rate (June through September) (1)			
Customer Charge - per month	Ş	3108.44	
Low-Income Pilot Program Charge - per month		\$ 2.11	
Energy Charge - per kWh First 150 kWh per kW of Billing Demand Next 200 kWh per kW of Billing Demand All Over 350 kWh per kW of Billing Demand		11.12¢ 8.36¢ 5.63¢	
Demand Charge - per kW of Total Billing Demand		\$ 6.19	
Winter Rate (October through May) (1)			
Customer Charge - per month	:	\$108.44	
Low-Income Pilot Program Charge - per month		\$ 2.11	
Base Energy Charge - per kWh First 150 kWh per kW of Base Demand Next 200 kWh per kW of Base Demand All Over 350 kWh per kW of Base Demand		6.98¢ 5.19¢ 4.09¢	
Seasonal Energy Charge - Seasonal kWh		4.08¢	
Demand Charge - per kW of Total Billing Demand		\$ 2.30	
Optional Time-cf-Day Adjustments			
- Additional Customer Charge - per month		\$21.08	
Energy Adjustment - per kWh	On-Peak	Off-Peak	
Summer kWh(June-September)(1) Winter kWh(October-May)(1)	Hours (2) +1.14¢ +0.35¢	Hours (2) -0.65¢ -0.19¢	
(1) Refer to General Rules and Regulations, V. Bil Monthly Billing Periods, for specific applicabili(2) On-peak and off-peak hours applicable herein shal I, paragraph A.	ty.		

*Indicates Change.

		Mo.P.S.C. in Case No. ER-2022-033	7.
DATE OF ISSU	E June 19, 2	023 DATE EFFECTIVE	July 9, 2023
ISSUED BY	Mark C. Birk	Chairman & President	St. Louis, Missouri
199050 81	NAME OF OFFICER	TITIF	ADDRESS

UNION ELECTRIC COMPANY

ELECTRIC SERVICE

	MO.P.S.C. SCHEDULE NO. 6		Зro	Revised	SHEET NO.	56.1
	CANCELLING MO.P.S.C. SCHEDULE NO. 6		2nd	Revised	SHEET NO.	56.1
APPLYING TO	MISSOURI	SERVICE	······································		41.	

SERVICE CLASSIFICATION NO. 3 (M) LARGE GENERAL SERVICE RATE (Cont'd.)

RATE BASED ON MONTHLY METER READINGS (Cont'd.)

<u>Fuel and Purchased Power Adjustment (Rider FAC)</u> Applicable to all metered kilowatthours (kWh) of energy.

Energy Efficiency Investment Charge (Rider EEIC) Applicable to all metered kilowatt-hours (kWh) of energy excluding kWh of energy supplied to customers that have satisfied the opt-out provisions of Section 393.1075, RSMo.

*Renewable Energy Standard Rate Adjustment Mechanism (Rider RESRAM) Applicable to all metered kilowatt-hours (kWh) of energy.

Payments Bills are due and payable within twenty-one (21) days from date of bill and become delinquent thereafter.

Term of Use One (1) year, terminable thereafter on three (3) days' notice.

<u>Tax Adjustment</u> Any license, franchise, gross receipts, occupation or similar charge or tax levied by any taxing authority on the amounts billed hereunder will be so designated and added as a separate item to bills rendered to customers under the jurisdiction of the taxing authority.

* Indicates Addition.

DATE OF ISSUE _	April 29, 2019	DATE EFFECTIVE	May 29, 2019
ISSUED BY	Michael Moehn	President	St. Louis, Missouri
	NAME OF OFFICER	TITI F	ADDRESS

LINION ELECTRIC COMPANY

ELECTRIC SERVICE

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	MO.P.S.C. SCHEDULE NO. 6	Original	SHEET NO. 56.2
CANCEL	LING MO.P.S.C. SCHEDULE NO.		SHEET NO.
APPLYING TO	MISSOURI SERVIC	E AREA	
	SERVICE CLASSIFICA		

1. . RATE APPLICATION

This rate is applicable to all secondary service to (1) any non-residential customer whose billing demand in any summer month exceeds 100 kW, or (2) at customer's request, to any other non-residential customer.

2. CHARACTER OF SERVICE SUPPLIED

Company will specify and provide a standard single- and/or three-phase alternating current secondary service voltage.

ENERGY BILLING 3.

The lesser of customer's maximum monthly metered demand or Rider I billing demand, if applicable, shall be used to apportion customer's kilowatt-hours to the kWh per kW energy rate steps for billing purposes. In addition, customer's proportion of Base and Seasonal Billing Demands, as defined in this rate, shall be used to initially apportion customer's kilowatt-hours to the Base and Seasonal Energy rate steps for billing purposes during the winter billing season.

DEMAND BILLING

Total Billing Demand

The monthly Total Billing Demand shall be the maximum metered demand during the current month or, where elected by customer, the billing demand determined in accordance with Rider I, Off-Peak Demand Provisions, but in no event less than 100 kW.

b. Base Billing Demand

The monthly Base Billing Demand, used only to apportion kilowatt-hours during the Company's winter billing season, shall be the Total Billing Demand during customer's immediately preceding May, October or maximum summer billing month, or customer's current winter month's Total Billing Demand, whichever is less.

Seasonal Billing Demand

The monthly Seasonal Billing Demand, used only to apportion kilowatt-hours during the Company's winter billing season, shall be the portion of customer's current month's Total Billing Demand in excess of customer's Base Billing Demand.

Customers Without Prior Billing Determinants

Customers on this rate who did not establish a billing demand during preceding billing periods shall have all kilowatt-hours billed on the Base Energy rate steps during the succeeding winter billing periods. After subsequent billing periods are completed, the customer's billing during the preceding winter will be reviewed using the Base Billing Demand determined from the following May billing period and a refund given if appropriate.

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DATE OF ISSUE	May 31, 2013	DATE EFFECTIVE	June 30, 2013
·			Oh Yanka Milaanii
ISSUED BY	Warner L. Baxter	President & CEO	St. Louis, Missouri
P-P-P-P-P-P-P-P-P-P-P-P-P-P-P-P-P-P-P-	NAME OF OFFICER	TITI F	ADDRESS

ELECTRIC SERVICE

MO.I	P.S.C. SCHEDULE NO. 6	2nd	Revised	SHEET NO.	56.3
CANCELLING MO.I	P.S.C. SCHEDULE NO. 6	1st	Revised	SHEET NO.	56.3
APPLYING TO	MISSOURI SERVICE	AREA	A STATE OF THE STA		***************************************

SERVICE CLASSIFICATION NO. 3 (M) LARGE GENERAL SERVICE RATE (Cont'd.)

4. DEMAND BILLING (Cont'd.)

e. Demand Meters

When normal use of an existing customer or the estimated use of a new customer exceeds 25,000 kWh per month for two consecutive summer billing months, or Company has reason to believe that customer's summer demand exceeds 100 kW regardless of his kWh use, Company will install a demand meter for purposes of measuring customer's demand.

*5. OPTIONAL TIME-OF-DAY (TOD) SERVICE

Applicable at customer's option for all Large General Service usage, subject to the following provisions:

- a. If an advanced meter is not present, Customer shall be transferred to this TOD rate option effective with TOD meter installation and transferred from this TOD rate option to the applicable non-TOD rate after the meter is removed.
- b. Customer electing this TOD option shall remain on said option for a minimum period of twelve (12) months, provided however, that customer may discontinue this option within the first ninety (90) days thereunder subject to the continued payment of the TOD customer charge, in lieu of any other customer charge, for the full twelve (12) month term of this option.
- c. Any customer canceling this TOD option cannot thereafter resume billing under said option for a period of one year following the last billing period on the TOD option.

6. CUMULATION OF SERVICES

Service provided through multiple meters to the same customer on the same premises and cumulated for billing purposes under this Service Classification, prior to May 5, 1990, may continue to receive such billing. Unless otherwise required for Company's engineering or other reasons, any additional services installed at customer's request and agreed to by Company on and after May 5, 1990, will not be cumulated or otherwise combined for billing purposes with any other service supplied to customer.

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7. GENERAL RULES AND REGULATIONS

In addition to the above specific rules and regulations, all of Company's General Rules and Regulations shall apply to the supply of service under this rate.

*Indicates Change.

			r of the Mo.P.S.C.		-2019-0335.
DATE OF ISSUE		March 18,	2020	DATE EFFECTIVE	April 1, 2020
ISSUED BY	Martin	J. Lyons	Chairman	& President	St. Louis, Missouri
	MARAE	OF OFFICED		TITI C	ADDRESS

ELECTRIC SERVICE

MO.P.S.C. SCHEDULE	NO	6		3r	d	Revised	SHEET NO.	56.4
CANCELLING MO.P.S.C. SCHEDULE	NO	6		2r	ıd	Revised	SHEET NO.	56.4
APPLYING TO	MISSO	URI	SERVICE	AREA				
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*THIS SHEET RESERVED FOR FUTURE USE

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*Indicate Change.

Tssued pursuant to the Order of the Mo.P.S.C. in Case No. ER-2019-0335.

DATE OF ISSUE March 18, 2020 DATE EFFECTIVE April 1, 2020

ISSUED BY Martin J. Lyons Chairman & President St. Louis, Missouri

NAME OF OFFICER TITLE ADDRESS

UNION ELECTRIC COMPANY ELECTRIC SERVICE	E		
MO.P.S.C. SCHEDULE NO. 6	6th Revised	SHEET NO.	170
CANCELLING MO.P.S.C. SCHEDULE NO. 6	5th Revised	SHEET NO.	170
APPLYING TO MISSOURI SERVICE	And the second s		
ELECTRIC POWER PU	RCHASES		
ELECTRIC POWER PURCHASES FROM Q	QUALIFYING FACILITIES		
1. *STANDARD RATES FOR PURCHASE			
	and with a design contaits	of 500 l	~Ta3
The standard rates for purchase from a custo or less are as follows:	Timer with a design capacity	OT 200 v	Z 64
a. Non-Time - Differentiated Energy Rate			
Summer Rate (Applicable during 4 mont)	hly billing		
periods of June through September)			
Summer	5.39¢ per kW	h	
Winter Rate (Applicable during 8 mont)	hly billing		
periods of October through May)			
Winter	3.92¢ per kW	lh	
b. Time-Differentiated Energy Rate			
	Marin Maria Cala		
Summer Rate (Applicable during 4 month periods of June through September)	mry billing		
Weekday (10 AM - 10 PM)	7.05¢ per kW	(la:	
Weekday (10 PM - 10 AM)	4.14¢ per kW	#895B114:	
Saturday, Sunday, Holiday (1)	4.89¢ per k0	A 18 2 CO	
Winter Rate (Applicable during 8 mont	hly billing		
periods of October through May)	*		
Weekday (10 AM - 10 PM)	4.28¢ per k	Wi .	
Weekday (10 PM - 10 AM)	3.71¢ per kV		
Saturday, Sunday, Holiday (1)	3.76¢ per k)	7h	
(1) Legal Holidays of New Year's Day	, Good Friday, Memorial Day	,	
Independence Day, Labor Day, Tha	nksgiving Day, Thanksgiving	Friday,	
Christmas Eve Day, and Christmas	Day.		
c. Customer Charge (per meter required for	parallel operation)		
	*		
Non-Time Differentiated Energy Single Phase	\$4.00 per mo	nth	
Three Phase	\$6.00 per mo		
Time Differentiated Energy			
Single Phase	\$13.00 per mo	nth	
Three Phase	\$15.00 per mo		

*Indicates Change.

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DATE OF ISSUE	January 13,	2023	DATE EFFECTIVE _	June 12, 2023
ISSUED BY	Mark C. Birk	Chairman	& President	St. Louis, Missouri
	NAME OF OFFICER		TITLE	ADDRESS

NION	LECTRIC COMPANY	ELECTRIC SERV	ICE	
	MO.P.S.C. SCHEDU	LE NO6	1st Revised	SHEET NO170.1
	CANCELLING MO.P.S.C. SCHEDU	LE NO6	Original	SHEET NO 170.1
PPLYING	g то	MISSOURI SERVICE		
		ELECTRIC POWER 1	PURCHASES	
	ELECTRIC POWER	PURCHASES FROM QUAL	IFYING FACILITIES (Con	t'd.)
2.	APPLICATION			
	This tariff applies to papacity from Qualifying the provisions of Rule (Commission).	g Facilities (herein	nafter referred to as '	'Customer") under
*	Company shall not be ob- purchase electric energi capacity larger than 20 Commission in Docket No	y or capacity from (Qualifying Facilities variaties variations of the Rederal R	with a net
з.	BILLING			
	Monthly billing between Contract between the pa		er shall be in accorda	nce with the
4.	CONTRACT			
	Whether or not purchase Company shall not be re and Customer have enter	quired to make any	purchase from Customer	until Company
5.	GENERAL RULES AND REGUL	ATIONS		
	All provisions of this as may be revised from the Commission's normal	time-to-time. All	terms of the tariff ar	
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	ndicates Addition			

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DATE OF ISSUE	February 2,	2017 DATE EFFECTIVE	March 4, 2017
ISSUED BY	Michael Moehn	President	St. Louis, Missouri
	NAME OF OFFICER	TITLE	ADDRESS

ELECTRIC SERVICE

M	O.P.S.C. SCHEDULE NO. 6	\$	Original	_ SHEET NO.	170.2
CANCELLING M	O.P.S.C. SCHEDULE NO.	Name and Address of the Address of t		SHEET NO.	
APPLYING TO	MISSOURI	SERVICE ARE	:A		

ELECTRIC POWER PURCHASES

ELECTRIC POWER PURCHASES FROM QUALIFYING FACILITIES (Cont'd.)

GUIDELINE TECHNICAL REQUIREMENTS FOR PARALLEL OPERATION WITH THE COMPANY'S SYSTEM

Introduction

The minimum technical requirements for safe parallel operation of Customer-owned electrical generating facilities with the Company's system are set forth below. These requirements will serve as a guide for Company and Customer engineering when planning such an installation; however, it is recognized that each installation may have specific requirements other than those set forth herein as a result of each installation's unique nature.

General Technical Requirements

1. Protection

Customer shall install protective devices capable of detecting fault conditions on both his system and the Company's system. These devices will separate Customer's system from the Company's system either directly or through an auxiliary device such as a circuit breaker. The separating device must be capable of interrupting the available fault current. The detection sensitivity and operating speed of these devices must be compatible with protective devices on the Company's system.

The Customer shall install equipment designed to automatically separate his system from the Company's system upon loss of the normal Company supply.

The Customer is responsible for protecting Customer-owned equipment in such a manner that faults or other disturbances on the Company's system or on Customer's system do not cause damage to his equipment.

Customer shall furnish information to Company regarding his proposed generation equipment and protective devices prior to parallel operation. Company will check the adequacy of this proposed equipment and its compatibility with protective devices on the Company's system and will either approve as submitted or specify additional equipment which will be required in order to begin parallel operation with the Company's system.

All protective relay settings that would affect any Company system relay settings will be specified by Company. These relays will be initially calibrated by Company to assure proper operation.

A manual visible disconnect switch must be provided which is under the exclusive jurisdictional control of the Company dispatcher. This manual switch must have the capability to be locked out of service by a Company-authorized switchman.

DATE OF ISSUE	May 31, 2013	DATE EFFECTIVE _	June 30, 2013
ISSUED BY	Warner L. Baxter	President & CEO	St. Louis, Missouri
1	NAME OF OFFICER	TITIE	ADDRESS

ELECTRIC SERVICE

į	MO.P.S.C. SCHEDULE NO. 6		Original	SHEET NO170.3
CANCELLING	MO.P.S.C. SCHEDULE NO.	-		SHEET NO.
APPLYING TO	MISSOURI	SERVICE	AREA	

ELECTRIC POWER PURCHASES

ELECTRIC POWER PURCHASES FROM QUALIFYING FACILITIES (Cont'd.)

General Technical Requirements (Cont'd.)

1. Protection (Cont'd.)

The above statements are the basic minimum protection requirements that would be associated with parallel generation. Additional requirements and/or equipment would depend on an in-depth study of each proposed connection.

2. Operation

Under certain conditions the intertie breaker (if one is required) must be operated by Customer in order for Company to operate the manual disconnect switch. Company may request this action for any of the following reasons:

- System emergency.
- Inspection of Customer's generating equipment or protective equipment reveals an unsafe condition.
- c. Customer's generating equipment interferes with other customers or with the operation of the Company's system.
- d. An outage is scheduled on the Company's supply circuit or feeder.

Customer shall be solely responsible for properly synchronizing his generating equipment with the Company's frequency and voltage. This includes resynchronizing his generator(s) after system outages or disturbances.

3. Quality of Service

The interconnection of Customer's generating equipment with the Company's system shall not cause any reduction in the quality of service being provided to other customers or cause any undesirable effect on any Company facilities.

In order to achieve this objective, wave form guidelines presently applicable to Customer's facility and which are measured at the point of interconnection between the Company and the qualifying facility are as follows:

- a. The phase unbalance must be less than 1%,
- b. The arithmetic sum of harmonics in the current or voltage must be less than 10%, and
- c. The root of the sum of the squares of harmonics in the current or voltage must be less than 5%.

The above lists should be viewed as general guidelines which are subject to change as dictated by experience as well as the unique nature of the electrical system at each point of interconnection.

The power factor of Customer's load with his generating equipment connected shall not be less than that specified by retail tariff for his applicable customer class.

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DATE OF ISSUE	May 31, 2013	DATE EFFECTIVE	June 30, 2013
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ISSUED BY	Warner L. Baxter	President & CEO	St. Louis, Missouri
-	NAME OF OFFICER	TITLE	ADDRESS

ELECTRIC SERVICE

	MO.P.S.C. SCHEDULE NO. 6	**************************************	Original	SHEET NO.	170.4
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APPLYING TO	MISSOURI	SERVICE AREA			
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ELECTRIC POWER PURCHASES

ELECTRIC POWER PURCHASES FROM QUALIFYING FACILITIES (Cont'd.)

General Technical Requirements (Cont'd.)

4. Metering

Parallel generating facilities connected to Company's system are divided into two groups: (a) "Two-way Power Flow," and (b) "One-way Power Flow." "Two-way Power Flow" would apply to Customer's facilities whose load is sufficiently variable or smaller than its generating capacity so that excess Customergenerated power could flow into the Company's system. "One-way Power Flow" would apply to Customer's facilities whose load is significantly larger than their generating capacity so that no Customer-generated power would flow into the Company's system except under fault conditions.

a. Two-way Power Flow

This type of installation provides for the interchange of energy in either direction as a normal operating mode.

The revenue metering for Two-way Power Flow installations shall include two series connected watthour meters with detents. One meter shall be connected to measure energy supply to Customer from Company; the other meter shall measure Customer-generated energy supplied to Company. The meter detents prevent operation of either meter in the reverse direction.

Additional metering may or may not be required depending on the terms of the contract between Company and Customer.

b. One-way Power Flow

This type of installation does not allow the interchange of energy from Customer to the Company.

The intertie circuit breaker will be tripped by equipment capable of detecting the reverse power flow condition—toward the Company's system.

This type installation requires a single revenue meter installation with detent to prevent operation of the meter in the reverse direction.

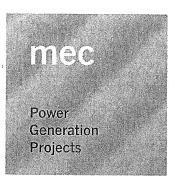
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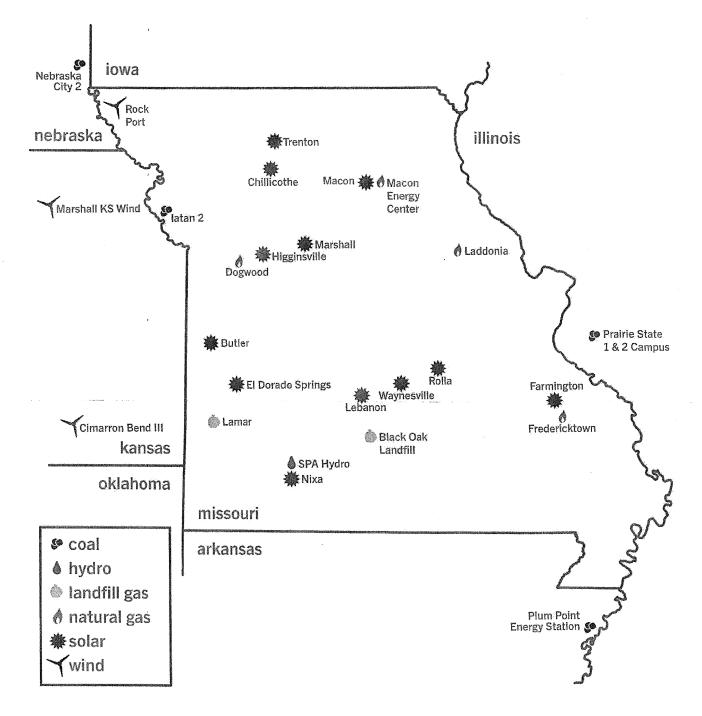
5. Other Requirements

All Customer installations shall adhere to any applicable requirements of the National Electrical Safety Code, the National Electric Code, Institute of Electrical and Electronics Engineers (IEEE), Underwriters Laboratories (UL), local electric codes, applicable NEMA codes, OSHA, and Company's Electric Service Rules as set forth in published tariffs.

Customer will bear all interconnection costs of parallel operation over and above the normal cost to serve his load.

DATE OF ISSUE	May 31, 2013	DATE EFFECTIVE	June 30, 2013	
ISSUED BY	Warner L. Baxter	President & CEO	St. Louis, Missouri	
***************************************	MAME OF OFFICED	דודו כ	ADDDECC	





October 16, 2023

Dear Value of Solar Task Force and other concerned parties,

Today, I urge you to support Missouri businesses like ours by maintaining and expanding net metering access in the state. In this uniquely challenging moment for the state economy, Missouri should be broadening and standardizing access for net metering and solar energy, not shrinking it. Solar is clean, simple, and abundant in Missouri. Expanding net metering and standardizing the solar interconnection process benefits everyone in the state, from industry leaders to job seekers. Solar saves us money and we reinvest those savings into our business.

In a time when Missouri businesses are struggling to cope with skyrocketing energy costs and rampant inflation, those who have transitioned to solar energy now have significant competitive advantages. Solar gives businesses drastically lower energy costs and helps them significantly lower our Federal Tax burden. Solar allows Missouri industry leaders to reinvest in their businesses, which creates jobs for the state, positive impacts on the environment, improves internal and external customer loyalty, and significantly improved competitive advantages compared to businesses in other states who have not invested in solar.

Reducing net metering access will eliminate an option for energy independence and allow monopoly industries to continue to take advantage of local consumers who have no other energy choice. The decision to limit net metering will also remove a business' freedom to choose how they purchase their energy, and this is simply not in line with Missouri values or interests. The traditional way of delivering energy to local businesses is heavily reliant on fossil fuels, which aren't produced in Missouri. However, the power to fuel the state's businesses is everywhere in Missouri, and it's a surefire way to energize the local economy instead of sending money to other states and forcing businesses to utilize an antiquated monopolistic energy delivery system.

Don't limit free choice and the economic viability of Missouri businesses. Vote to maintain and expand net metering in the state.

Thank you.

Nick Hale

General Counsel and Corporate Secretary

Boulevard Brewing Company



Dear Value of Solar Task Force and other concerned parties,

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Don't limit free choice and the economic viability of Missouri businesses. Vote to maintain and expand metering in the state.

Thank you.

Andrew Stream
Chief Financial Officer

VHC BRANDS

Dear Value of Solar Task Force, and other Concerned Parties -

Today, we urge you to maintain and expand net metering in the State of Missouri.

When in doubt, or no matter what some monopoly or traditional industries say, just remember – Net Metering is a Net PLUS for Missouri businesses, consumers, and the Missouri economy.

Here are a few things you accomplish by leading Missouri with maintaining and expanding Net Metering, RIGHT NOW and in the future:

- Help Fight Inflation it's amazing but true, we have an inflation problem in the US and in
 Missouri that rivals the days of Jimmy Carter and monopolistic oil embargoes! Businesses and
 Consumers see rising costs everywhere including the cost of energy when that energy is
 sourced from traditional providers. Do you want everyone to pay MORE, or LESS, for their
 electricity? Do you want to HELP or HINDER businesses with burdensome costs? If the answer
 is HELP, then Net Metering is one of the best ways to do so in today's environment.
- Put the Power of Power in the hands of the User We let people choose their homes, their cars, their spouse, their place of worship, and now even their choice of recreational / medicinal marijuana in the State of Missouri. It just makes sense to let the USER DECIDE how they want their electricity, doesn't it?
- Stake your energy flag in the USA NOT in a foreign country being energy independent is an inherently stronger position to be in for a person, a state, or an entire country, than being energy DEPENDENT. Think about the biggest oil producing countries in the world Venezuela, Russia, Saudi Arabia... what do all of these foreign countries have in common? They are anti-democracy, anti-freedom, and generally openly or quietly Anti-Americani A vote for Net Metering is a vote for maintaining energy independence at every level. Let's keep our hard earned money-here in Missouri, rather than EXPORT it to other states or other countries.
- Help Lower The Cost of Doing Business In Missouri businesses that install solar arrays and utilize net metering become energy independent, but they also lower expenses. In some examples, businesses have lowered their energy costs from thousands of dollars a month, to zero, and in fact, have credit on their local electric account! Those savings protect Missouri jobs, help businesses spend money on needed investments, and make Missouri businesses more competitive as a result. It's tough on consumers and on businesses these days they need to know Missouri has their back when it comes to controlling costs.
- Maintain valuable Federal Tax Credits at now cost to the State of Missouri, we can continue to lower a business' tax burden when they install solar versus spending their money on traditional energy sources that have no tax benefits.
- Support Rural Development infrastructure is costly and now at what seems like an all-time-high to build new roads, buildings, and infrastructure. A business that that consumes

power from a solar grid lowers the cost of infrastructure and supports rural development since location does not dictate development.

Solar energy production has other benefits, now and in the future, for Net PLUS for Missouri:

- Help promote and protect the beauty of Missouri we have one of the most enjoyable states in the USA to spend time outside in our clean rivers, lakes and woodlands. Solar keeps in that way, traditional energy consumption does not. If you have children or grandchildren, whether you believe we are created in God's Image, or we came from the stars we owe it to future generations to leave Missouri better off environmentally.
- Unlimited Supply current projections show even the most oil-rich nations essentially running out of productive oil fields in the next few decades. Solar power, on the other hand, is unlimited and local.
- Works with Local Utilities, not against them unlike their model, solar isn't "either/or", "take it or leave it, maybe you don't need electricity" thinking. Solar works in conjunction with the power grid already put in place by our longstanding, trusted, and community-focused electrical coops.

Remember – Net Metering is a Net PLUS for Missouri businesses and Missouri consumers. Let's focus on the future of Missouri, not on the past, and not on legacy ways of thinking.

Vote to maintain and expand Net Metering in Missouri and make the future a Net PLUS for Missouri and our Nation.

Thank You,

Ken Cline



SEYER INDUSTRIES • 66 PATMOS CT. • ST. PETERS, MO 63376 • (636) 928-1190

Dear Value of Solar Task Force and other concerned parties,

Today, I urge you to support Missouri businesses like ours by maintaining and expanding net metering access in the state. In this uniquely challenging moment for the state economy, Missouri should be broadening and standardizing access for net metering and solar energy, not shrinking it. Solar is clean, simple, and abundant in Missouri. Expanding net metering and standardizing the solar interconnection process benefits everyone in the state, from industry leaders to job seekers. Solar saves us money and we reinvest those savings into our business.

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Reducing net metering access will eliminate an option for energy independence and allow monopoly industries to continue to take advantage of local consumers who have no other energy choice. The decision to limit net metering will also remove a business' freedom to choose how they purchase their energy, and this is simply not in line with Missouri values or interests. The traditional way of delivering energy to local businesses is heavily reliant on fossil fuels, which aren't produced in Missouri. However, the power to fuel the state's businesses with solar is everywhere in Missouri. It's a sensible way to energize the local economy instead of sending money to other states and forcing businesses to utilize an antiquated monopolistic energy delivery system.

Don't limit free choice and the economic viability of Missouri businesses. Vote to maintain and expand metering in the state.

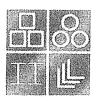
Thank you,

Christopher W. Seyer

CEO

Seyer Industries, Inc.





September 28, 2023

Dear Value of Solar Task Force and other concerned parties,

Today, I urge you to support Missouri businesses like ours by maintaining and expanding net metering access in the state. In this uniquely challenging moment for the state economy, Missouri should be broadening and standardizing access for net metering and solar energy, not shrinking it. Solar is clean, simple, and abundant in Missouri. Expanding net metering and standardizing the solar interconnection process benefits everyone in the state, from industry leaders to job seekers. Solar saves us money and we relevest those savings into our business.

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Don't limit free choice and the economic viability of Missouri businesses. Vote to maintain and expand metering in the state.

If you have any questions, please contact me at (785) 587-5143.

Yours,

Dirk Daveline

Vice President /Chief Financial Officer



HY-C Company 10950 Linpage Place Saint Louis, Missouri 63132 t 800.325.7076 f 314.241.2277 hyccompany.com

October 4, 2023

Dear Value of Solar Task Force, and other concerned parties:

Please support HY-C Company and other Missouri businesses by maintaining and expanding net metering access in the state.

According to the US Bureau of Labor Statistics, employment of solar photovoltaic installers nationwide is expected to grow 27% from now through 2031, a faster rate than the average for all occupations. Let's make sure Missouri gets our fair share of this economic growth.

Expanding net metering and standardizing the solar interconnection process benefits everyone in the state, from industry leaders to job seekers.

All businesses in Missouri are dealing with inflation, our solar installations have given us meaningful competitive advantage against businesses on either coast.

With 263,883 solar workers spread across all 50 states, let's make sure Missouri keeps up with other states in this important sector.

Reducing net metering access will eliminate an option for energy independence and allow monopoly industries to continue to take advantage of local consumers. Strong independent business-minded Missouri voters always push for individual control rather than trusting a monopoly.

Please vote to maintain and expand metering in the state.

David Walters





2441 Hwy 61 N • Troy, Missouri 63379 • Office (573) 384-5855 • Fax (573) 384-5914 www.championprecast.com

Good Day, .

Let's be clear: Every acre of solar that comes to Missouri displaces 121 to 138 metric tons of climate-warming carbon dioxide. I urge you to support Missouri businesses like ours by maintaining and expanding net metering. Nothing is worse for our environment, or our forests and farmlands, than catastrophic climate change. Medium to high warming scenarios will wipe out entire crop yields by paradoxically intensifying both flooding and drought.

Over the last 6 years, Champion Precast Inc. has added (3) solar systems to our property. Our overhead savings from these projects have made us more competitive, especially with foreign manufacturers. Now, we are limited in adding any more solar due to Missouri's laws/regulations.

In a time when Missouri businesses are struggling to cope with skyrocketing energy costs and rampant inflation, those who have transitioned to solar energy now have significant competitive advantages. Solar gives businesses drastically lower energy costs and helps them significantly lower our Federal Tax burden. Solar allows Missouri industry leaders to reinvest in their businesses, which creates jobs for the state, and positive impacts on the environment.

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Vote to maintain and expand metering in the state.

Jon Ohmes

CEO

ISO 9001: 2008 Certified NPCA Certified Plant



Dear Value of Solar Task Force and other concerned parties,

Today, I urge you to support Missouri businesses like ours by maintaining and expanding net metering access in the state. In this uniquely challenging moment for the state economy, Missouri should be broadening and standardizing access for net metering and solar energy, not shrinking it. Solar is clean, simple, and abundant in Missouri. Expanding net metering and standardizing the solar interconnection process benefits everyone in the state, from industry leaders to job seekers. Solar saves us money and we reinvest those savings into our business. The growth in our business then grows the Missouri economy.

In a time when Missouri businesses are struggling to cope with skyrocketing costs and rampant inflation, those who have transitioned to solar energy now have significant competitive advantages. Solar drastically reduces energy costs and helps us significantly lower our Federal Tax burden. Solar allows Missouri industry leaders to reinvest in their businesses. This creates jobs, positively impacts the environment, improves internal and external customer loyalty, and significantly improves competitive advantages across state lines.

Reducing net metering access will eliminate an option for energy independence and allow monopoly industries to continue to take advantage of local consumers who have no other energy choice. The decision to limit net metering will also remove a business' freedom to choose how they purchase their energy. This is simply not in line with Missouri values or interests. The traditional way of delivering energy to local businesses is heavily reliant on fossil fuels, which aren't-produced in Missouri. However, the power to fuel the state's businesses is everywhere in Missouri, and it's a surefire way to energize the local economy. We would rather help benefit our own state instead of sending money to other states and forcing businesses to utilize an antiquated monopolistic energy delivery system.

Don't limit free choice and the economic viability of Missouri businesses. Vote to maintain and expand metering in the state.

Phank you

Karanne Bentori Managing Partner

Balderston Auto Group



#3 TLC Lane ST. Clair, MO 63077 PH (636)629-5800 FAX (636)629-6500

Q

10/5/2023

Dear Concerned Party

Regarding the "Value of Solar Task Force"

I would like to recommend that net metering in the state of Missouri be maintained and expanded.

My business currently takes advantage of net metering and allows me to be lower my utility costs and gives me an economic advantage over my competitors who are located in non-net metering areas. This enables me to expand my Missouri business more than I would have been able to without net metering. This is good for me, and good for the state of Missouri.

Net metering encourages the installation of solar systems. Solar systems reduce energy costs. Reduced energy costs gives existing business a reason to stay in Missouri and a reason for new business to locate in Missouri.

Solar systems are clean and simple, and solar energy is abundant in Missouri, unlike other sources of energy. Expanding net metering benefits everyone in the state. Solar saves us money and we reinvest those savings into our Missouri businesses.

Solar systems and net metering gives businesses significantly lower energy costs and helps them reinvest in their businesses, which creates jobs for the state, positive impacts on the environment, and significantly improved competitive advantages compared to businesses in other states who have not invested in solar.

Reducing net metering access will discourage installation of solar systems and reduce the competitiveness to businesses in states that do have net metering. The power to fuel the state's businesses is everywhere in Missouri, and net metering is a way to energize the local economy instead of sending money to other states.

Please don't limit the economic viability of Missouri businesses. Vote to maintain and expand net metering in the state.

Thank you.

Mark Dickhaus

President



October

Dear Value of Solar Task Force and other concerned parties.

We installed Solar Pannels five years or so ago and it has reduced our energy cost to the point we have received a good return on investment and saved non-renewable energy. It was simple and easy to install with the contractor we utilized. I believe anytime we as humans on this planet can utilize any abundant natural resources that do not have to be replaced and is renewable, energy independent, low maintenance, clean and offers a cost saving then we as inhabitants of the plant must take advantage of utilizing it. This can save the other natural resources for emergencies and or for utilization that cannot use Solar energy.

Today, I urge you to support Missouri businesses like ours by maintaining and expanding net metering access in the state. In this uniquely challenging moment for the state economy, Missouri should be broadening and standardizing access for net metering and solar energy, not shrinking it. Solar is clean, simple, and abundant in Missouri. Expanding net metering and standardizing the solar interconnection process benefits everyone in the state, from industry leaders to job seekers. Solar saves us money and we reinvest those savings into our business.

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Don't limit free choice and the economic viability of Missouri businesses. Vote to maintain and expand metering in the state.

Professional yours,

Nick Smock Pharm D., MBA

PBA Health President, CEO

6300/Enterprise Road Kansas City, MO 64120

816-245-5700



P: (816) 761-5900 · F: (816) 761-8225 13201 Arrington Rd., Grandview, MO 64030 ustoy.com

October 5, 2023

Dear Value of Solar Task Force and other concerned parties,

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Don't limit free choice and the economic viability of Missouri businesses. Vote to maintain and expand metering in the state.

Thank you,

(sell-

 $\dot{\delta}$

Seth Freiden CEO



Visit our family of brands
CONSTRUCTIVE
PLAYTHINGS





October 10, 2023

Dear Value of Solar Task Force and other concerned parties,

Today, I urge you to support Missouri businesses like ours by maintaining and expanding net metering access in the state. In this uniquely challenging moment for the state economy, Missouri should be broadening and standardizing access for net metering and solar energy, not shrinking-it.—Solar is clean, simple, and abundant in Missouri. Expanding net metering and standardizing the solar interconnection process benefits everyone in the state, from industry leaders to job seekers. Solar saves us money and we reinvest those savings into our business.

In a time when Missouri businesses are struggling to cope with skyrocketing energy costs and rampant inflation, those who have transitioned to solar energy now have significant competitive advantages. Solar gives businesses drastically lower energy costs and helps them significantly lower our Federal Tax burden. Solar allows Missouri industry leaders to reinvest in their businesses, which creates jobs for the state, positive impacts on the environment, improves internal and external customer loyalty, and significantly improved competitive advantages compared to businesses in other states who have not invested in solar.

Reducing net metering access will eliminate an option for energy independence and allow monopoly industries to continue to take advantage of local consumers who have no other energy choice. The decision to limit net metering will also remove a business' freedom to choose how they purchase their energy, and this is simply not in line with Missouri values or interests. The traditional way of delivering energy to local businesses is heavily reliant on fossil fuels, which aren't produced in Missouri. However, the power to fuel the state's businesses is everywhere in Missouri, and it's a surefire way to energize the local economy instead of sending money to other states and forcing businesses to utilize an antiquated monopolistic energy delivery system.

Don't limit free choice and the economic viability of Missouri businesses. Vote to maintain and expand metering in the state.

Thank you,

Shannon imler

CEO

Ice Cream Factory



October 5, 2023

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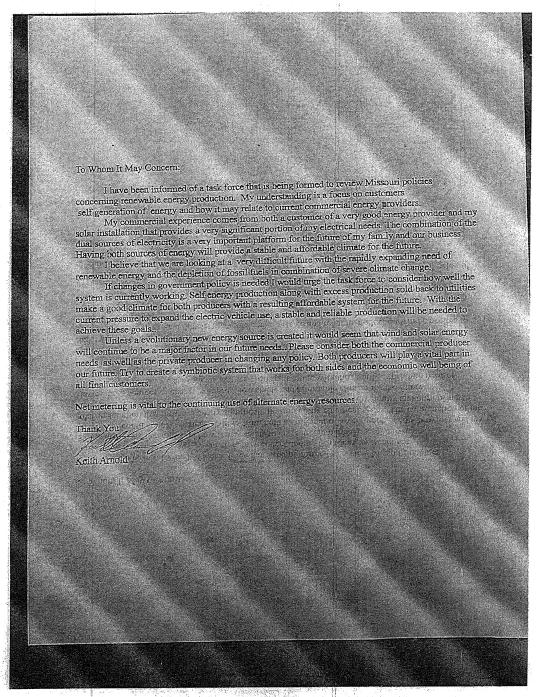
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Thank you.

Tony Oberman

President

Vernon Graphic Solutions



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